
TEKTRONIX, INC.
1968 Annual Report
22nd Year Ending May 25, 1968

Transfer Agents

United States National Bank of Oregon
Portland, Oregon
Morgan Guaranty Trust Company
New York, New York

Registrars

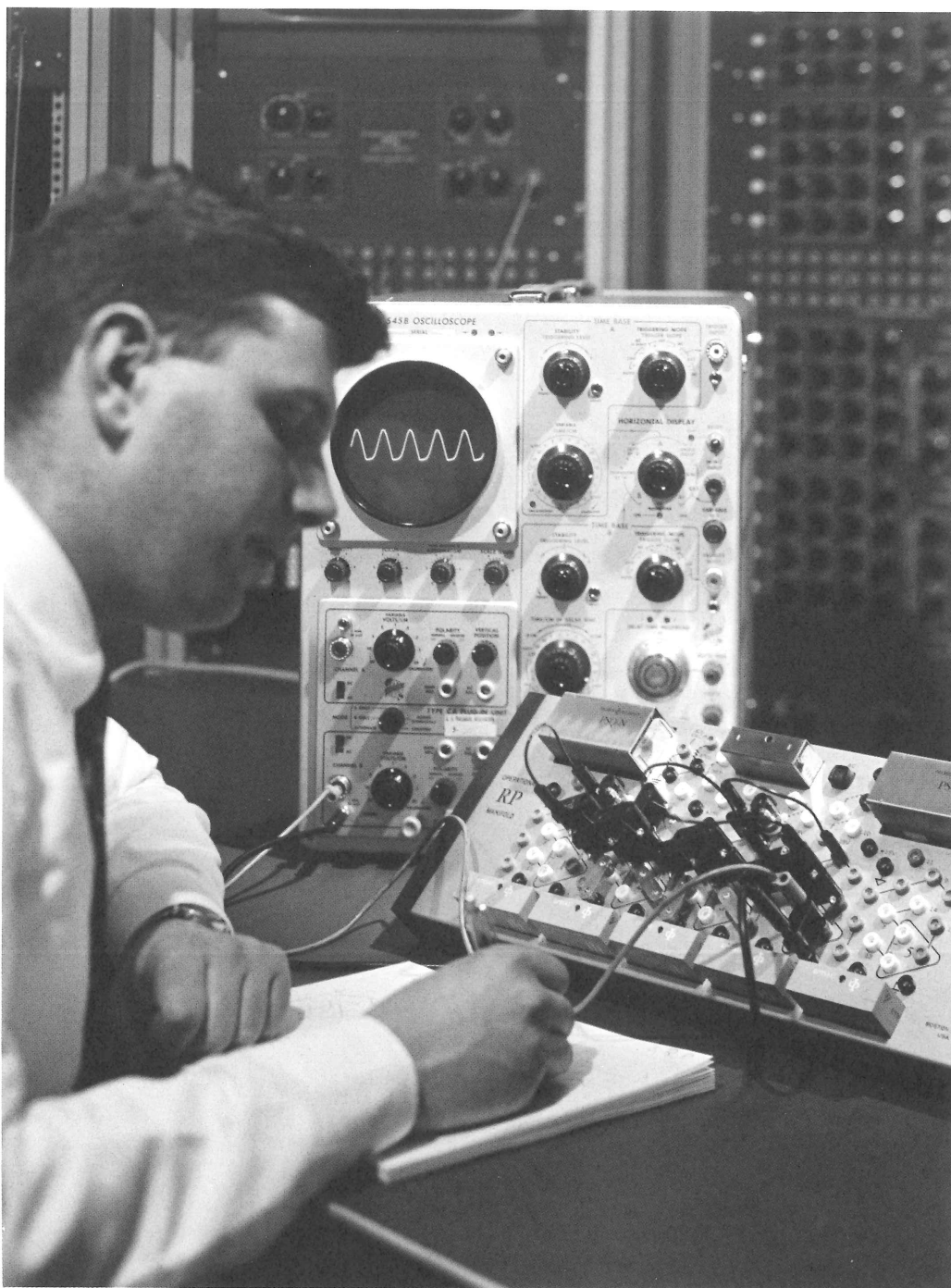
First National Bank of Oregon
Portland, Oregon
First National City Bank
New York, New York

Mailing Address:

TEKTRONIX, INC.
P. O. Box 500
Beaverton, Oregon 97005
Telephone:
644-0161, Area Code 503

SHAREHOLDERS MEETING

The annual meeting of shareholders of Tektronix, Inc. will be held on Saturday, September 21, 1968, at 9 a.m. Pacific Daylight Time, in the Cafeteria Building, S. W. Karl Braun Drive, Tektronix Industrial Park, near Beaverton, Oregon.



Tektronix, Inc. 1968 Annual Report

CONTENTS

Financial Highlights	2
President's Message	3
The Oscilloscope: A System	5
1968 Operations: A Review	6
The Year Outside: A Market Analysis	8
The Year Inside: A Reprise	12
Vertical Integration: An Essential	17
Today's Tektronix: A Snapshot	20
1969: Tomorrow	23
Resources Provided and Applied	25
Explanation of Financial Statements	25
Earnings and Reinvested Earnings	26
Financial Condition	27
Notes to Financial Statement	28
Accountant's Opinion	29
Financial Statistics	30
Directors, Officers and Management	31
Manufacturing Facilities	32
Marketing Facilities	32

TEKTRONIX OSCILLOSCOPE is used to check out an operational amplifier circuit in a newly developed manifold at Philbrick Researches. (Photo courtesy Electronic Capabilities magazine.)

Tektronix Financial Highlights

The accounting year is the 52 or 53 weeks ending the last Saturday in May.

1967		1968		Increase
\$129,031,000	100%	\$133,656,000	100%	4%
115,642,000	90%	120,227,000	90%	4%
45,004,000	35%	45,607,000	34%	1%
55,099,000	43%	58,429,000	44%	6%
2,991,000	2%	3,436,000	2%	15%
12,548,000	10%	12,755,000	10%	2%
13,389,000	10%	13,429,000	10%	0%
\$1.68		\$1.68		0%
129,963,000		137,474,000		6%

RECEIVED BY THE COMPANY

Mostly from the sale of oscilloscopes and related instruments.

RELATED COSTS AND EXPENSES

TO OUTSIDE SOURCES

To pay for raw materials; purchased parts; advertising space and services; insurance; rent; utilities; interest, and other business expenses.

FOR EMPLOYEES

To pay the men and women who design, make, sell and service our instruments—including profit share, social security and other employee benefits.

FOR USE OF FACILITIES OWNED

To provide for depreciation in value of buildings, machinery and equipment resulting from use, wear and age, mostly computed by sum-of-years-digits method.

FOR TAXES

To pay U. S., foreign, state and local taxes and licenses. (1968 includes the 10% U. S. income tax surcharge retroactive to January 1, 1968 which reduced earnings per share by 4¢.)

RESULTING IN EARNINGS

Used to retire debt and expand our business.

EARNINGS PER COMMON SHARE

(1968 would have been \$1.72 except for the above mentioned U. S. income tax surcharge.)

ORDERS RECEIVED

Customers' orders measured at U. S. catalog price.

1967	1968	Increase (Decrease)
\$62,952,000	\$72,626,000	\$ 9,674,000
\$23,258,000	\$21,839,000	(\$ 1,419,000)
\$39,694,000	\$50,787,000	\$11,093,000
\$25,433,000	\$28,332,000	\$ 2,899,000
\$ 2,077,000	\$ 988,000	(\$ 1,089,000)
\$67,548,000	\$81,597,000	\$14,049,000
7,270	7,852	582

Current Assets

Current Liabilities

Working Capital

Facilities—Net

Long-Term Indebtedness

Shareholders' Equity

Number of Employees at Year End

To Shareholders and Employees

In past years' reports, I have sometimes closed by inviting you to visit Tektronix, if you are in this area. May I again extend that invitation.

If you *were* to visit, you would get a more direct idea of the company that we summarize in the following pages—and a truer one than any recitation of events and numbers can provide.

I suspect you would be most greatly impressed—as I still am after 22 years—with the very large number of talents and skills represented here, and with the complex interrelationship of human and technical resources that sophisticated instrument manufacture requires. You would also remark, probably, on the attitude of our employees—an exemplary attitude of searching for new solutions, eagerness to grow and high innovativeness.

And you couldn't help but notice the broad extent of the groundwork being laid—affecting, in a major way, all areas of the company—in preparation for the manufacture of new instruments presently in engineering development. In fact, this groundwork is the most significant aspect of the year just ended.

Quarterly and annual reports seldom are timed to coincide with the important things a company does. What's more, the most significant aspects often are continuing ones (for instance, major instrument development programs take a matter of years), and repeatedly mentioning them tends to make a company seem somewhat like a watched pot.

There was nothing spectacular about Tektronix' gains in earnings (later offset by surtax), in sales and in orders. Of course we are gratified that, in

a difficult year for the industry, we did not fare badly. The financial figures, in detail, are included elsewhere in this report.

Tektronix' operation continued very profitably, despite increases in payroll and in many material costs, and in spite of increased expenditures on buildings, facilities and equipment.

That high level of investment will continue in the year to come. For instance, plans being developed by our operating managers suggest that, in the next few years, we will need to add another one-third to our existing 1,698,000 square feet of building space—and those additions are to accommodate just those new activities we know about *now*. Comparable levels of investment in processes and support technologies are also predictable. All this may give you some idea of the scope of the groundwork necessary to support the high output of innovative instruments we have scheduled in years ahead.

Of the 22 new Tektronix products introduced this year, the type 611 display unit probably caused the most excitement, in a new (to us) market area, information display. This market, and our expectations of it, are described later in the report.

Sales of high-performance portables continued strong, meeting the needs of the computer industry, among others. Sales of the type 454, a true-state-of-the-art oscilloscope, exceeded our expectations, proving again that an instrument providing advanced performance capability makes its own market.

This year our intensified recruitment of employees from the ranks of the somewhat ineptly-termed

“hard-core”—both black and white—benefited us: We have acquired a number of excellent new employees. Our experience here echoes what we have learned in our long-established program of hiring the handicapped: That what counts is ability, not disability (social or physical).

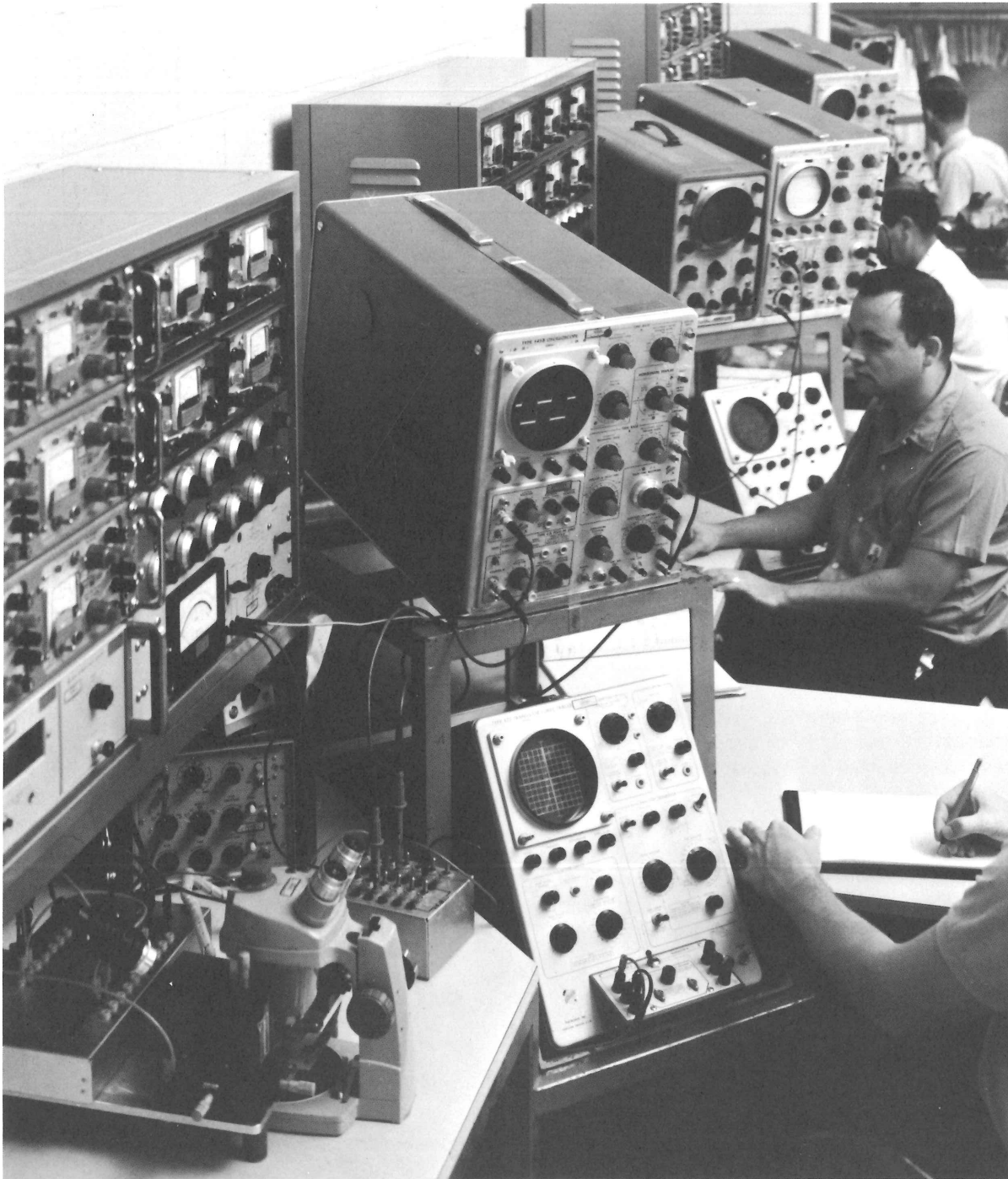
Our practice has *always* been to seek employees with ability and potential, wherever we could find them. The current cooperative efforts of local organizations make it easier to tackle some of the social problems that are so vexing today. Publicity accompanying the cooperative program may help erase the stereotype, in the poverty areas, that “industry is not interested.” The channels through which we can act are now more varied—and more effective. We will also continue to develop our own job-opportunity programs and to pursue them with earnestness.

Looking at the year in retrospect, I feel proud of our company and confident of its future. I am glad, in this brief space, to have had the opportunity to share with you some of my reasons.



August 2, 1968

President



SOPHISTICATED INSTRUMENTATION is needed by Texas Instruments, Inc. for its semiconductor failure analysis laboratory. Eight oscilloscopes are pictured here; six are Tektronix instruments. (Photo courtesy Texas Instruments.)

The Oscilloscope: A System

Although it's easy enough to describe how one works, there's nothing simple about a laboratory oscilloscope. It is a complex and integrated system, with thousands of electronic and mechanical components. Its circuitry is as varied as that of a giant digital computer, and far more accurate.

The oscilloscope is a major tool of technology's cutting edge. That edge, the outer limits of technical achievement at a given moment, is often called "the state of the art."

Not every product—not every instrument—need attain the state of the art; but an oscilloscope often must extend it. For, if science and technology are to progress, reliable measuring instruments must be there—first.

Because the oscilloscope is such a complex system, a state-of-the-art instrument can not always rely on commercially available parts and pieces, which often are made for general or routine rather than unique and advanced uses. For this reason, among others, Tektronix produces a very large number of its own components and materials, fitting each to the purpose of the particular oscilloscope system.

Easily said. But, each specially tailored component, each state-of-the-art portion, increases the total development challenge, effort and time. To understand our product is, in turn, to understand the nature of Tektronix. For the company has itself become a complex and integrated assemblage of human skills—a system in its own right.

A Tektronix oscilloscope can measure phenomena occurring in a fraction of a millionth of a second, or longer than a minute. It is very complex, but its principles are easy to learn. *The oscilloscope draws a graph of some "event" so someone can measure the amount of that event and how long it lasts.*

It has three major segments:

- The CRT, or cathode-ray tube (like a TV picture tube), on whose fluorescent face the graph appears. A focused electron beam from the CRT

cathode makes the screen glow, a spot of light. This spot—which can be moved up and down or from side to side—draws the graph on the tube face, much as a pencil does on paper.

- The time-base generator, whose electrical signal moves the spot across the screen at a uniform speed, left to right, repeatedly. The screen is ruled off like a sheet of graph paper. You can make the spot cross the screen at almost any rate—one second per ruled division, a hundred/millionth of a second (or less) per division.

At slow speeds you see the spot move. At very fast speeds, it appears as a solid line.

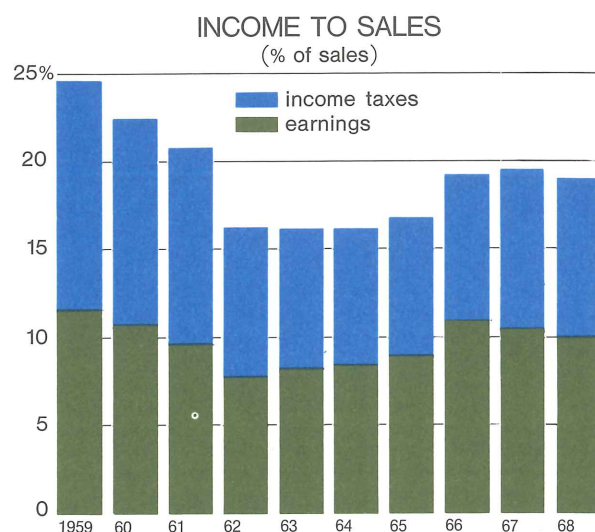
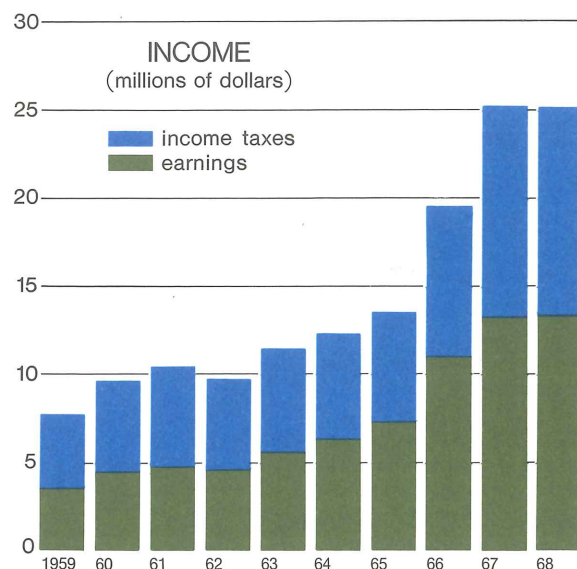
- The vertical amplifier, which, when connected to a changing voltage, moves the spot up and down. You can make each vertical ruled division represent many volts, or a small fraction of one volt. The number of divisions the spot moves tells you the voltage of the signal—and thus the amplitude of whatever phenomenon that voltage represents: Heat, light, sound, gravity, pressure, acceleration, chemical reaction...

Thus the oscilloscope plots a graph of an electrical event—or of any phenomenon converted to voltage. This graph tells whether the voltage is changing positively or negatively; the amplitude and duration of the event (or any portion of the event) and the shape of the waveform.

Phenomena that happen over and over produce a continuous image on the screen. But the oscilloscope can also graph events that happen randomly, or only once: An explosion, the radiation of particles as an atom is split... Even if the event happens only once and lasts only a millionth of a second, special cameras can record the graph as it flashes across the screen—and some oscilloscope types can even store the graph on the screen, and erase it when it's no longer needed.

In summary: The oscilloscope graphs the changes in some event with relation to time—measuring the amplitude of the event on its vertical axis, and how long the event lasts on its horizontal axis.

1968 Operations: A Review



The final words on this page last year said:

"We ended the year organizationally in a position of strength and responsiveness, with a trained and efficient work force."

It's good we did. For the year just ended called on all the strength, flexibility and efficiency we could muster. In some ways it was a very trying year.

It ran flat for some electronics companies—and downhill for others. But Tektronix increased its earnings (an increase that was offset after the fiscal year closed, by the retroactive 10 per cent federal surtax.) Sales and orders also rose, although not much.

Because payroll and most material costs continue upward, it normally takes substantial sales growth for earnings to hold steady, let alone increase. Thus our excellent earnings-to-sales ratio—once again among the highest in our segment of the industry—testifies in part to careful management attention to the details as well as the broad concepts of operation; to closely surveyed costs, and to continued gains in employee productivity.

Given the tepid, quirky and war-distorted U. S. economy, and measuring against the performance of the rest of industry, we view 1968 as a good year, hard-fought. Yet its major significance to Tektronix is not yet visible: This year—more than any recent year—was one of building technical strength, deep into and broadly across our organization.

Expenditures for new people, processes, equipment and facilities have never been higher. (Our Engineering staff alone increased from 660 to 749 people.) These large investments may seem discretionary, but, in truth, to maintain leadership in an advanced technical field, they are essential.

International sales did well; they grew by 24 per cent—again vindicating our original reasons for manufacturing overseas. In the United Kingdom, for example, our business would have slumped had we not been able to build oscilloscopes on

the Isle of Guernsey, thus avoiding restrictive protectionist measures.

The Vietnam conflict, unabated, continued to siphon resources away from useful "peacetime" purposes, and probably retarded the growth of the electronics market. Our sales in the U. S. declined.

Other world political/economic/military pressures also impinged upon Tektronix operations, as they must on a global company with a ubiquitous product: Devaluation of the pound; disruption in France, and so on. President Johnson's restrictions on international investment provided operational drag of another sort: We spent much time, and thus money, studying and interpreting these new and complex rules.

Financially, in brief:

Earnings increased, moving to \$13,429,000 from \$13,389,000.

Earnings per share would have increased to \$1.72 except for retroactive passage of U. S. income tax surcharge which held them at last year's \$1.68.

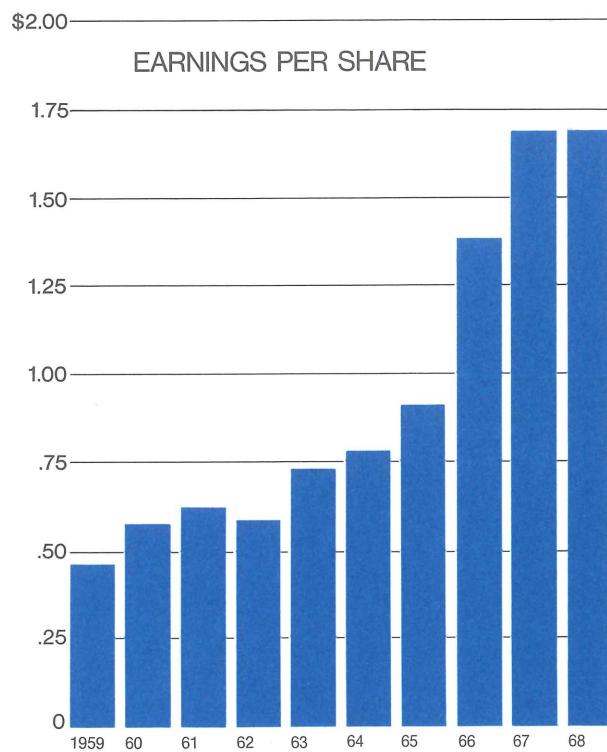
Sales went up, to \$133,700,000 from \$129,000,000. The international segment increased to \$43,500,000 from \$35,100,000; the U. S. portion declined, to \$90,200,000 from \$93,900,000. Sales directly to United States government agencies dropped from last year's 11 per cent to 9 per cent of consolidated sales—and out of the 11-to-13 per cent range of the previous five years.

Customer orders increased by 6 per cent, to \$137,500,000 from \$129,900,000.

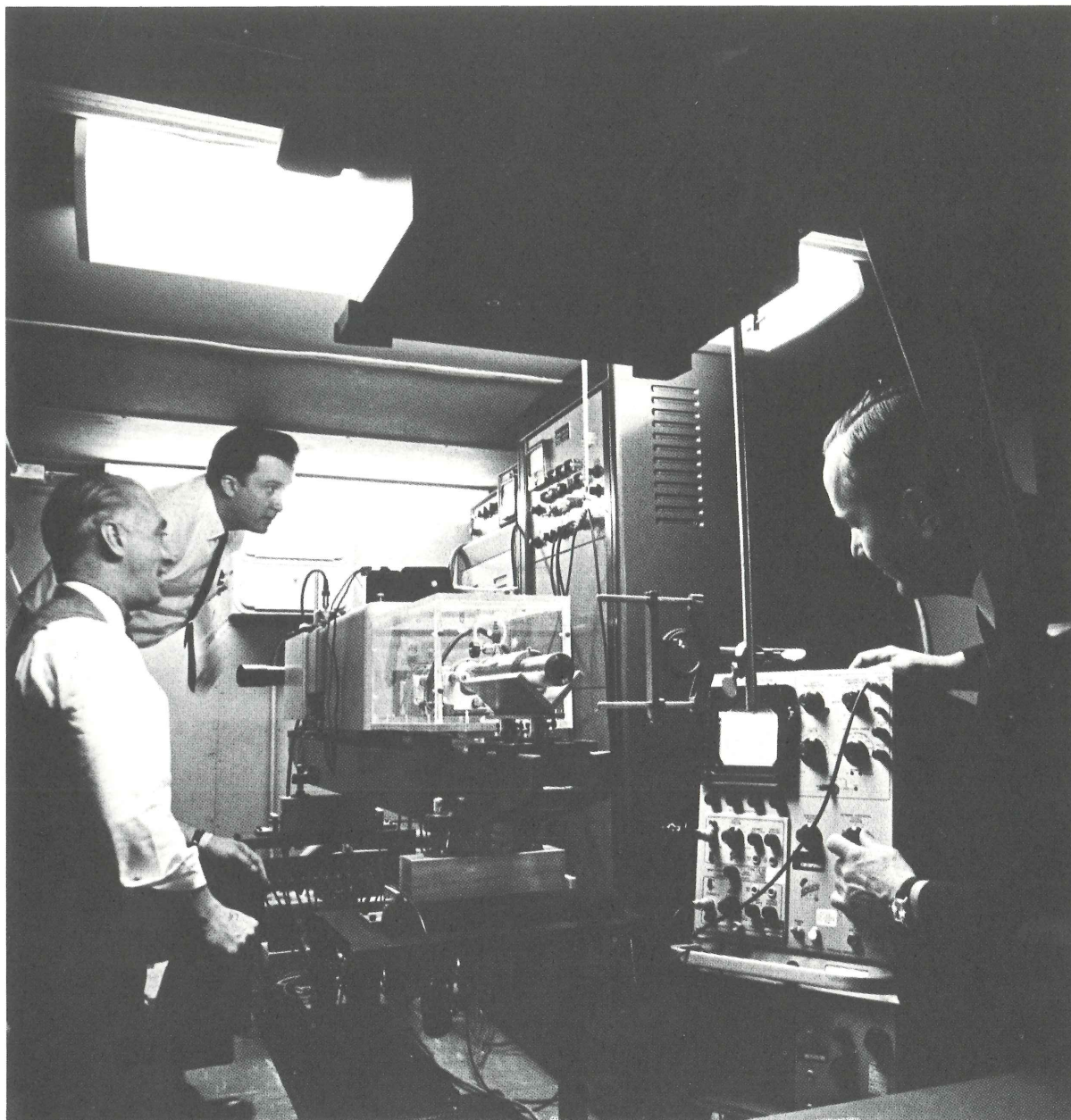
Production also is worth note, effectively responding to orders that spurred from a slow trend most of the year to a higher level, and a concentration of portable instruments, in the closing months.

Still, the year's main importance was not financial, but developmental—reinforcing and broadening our technical power. We can't, of course, disclose in detail the exact meanings of this investment, but it will provide grist for many annual reports to come. It's enough to say that the magnitude of

this effort is a statement of our confidence—in the future, in our products and in the innovative and productive men and women who make up Tektronix.



SPECTRUM-TUNED laser measures the location and concentration of gases and particles in the upper atmosphere. Tektronix oscilloscope is essential in this research activity. (Photo courtesy GCA Corporation.)



The Year Outside: A Market Analysis

The minus: An overextended U.S. economy. The plus: A brisk foreign demand. That was, in brief, the story of the oscilloscope market in fiscal 1968. Our net growth was less than dramatic, prompting one Tektronix executive to a whimsical analysis of his own.

"A ho-hum year," was what he called it. In truth, it was anything but that.

The conflict in Vietnam cast a darker shadow across the nation. The American economy, which for a decade had underwritten both domestic "peace" and an undeclared foreign war, proved not to be infinitely absorbent after all. The message hinted at a year earlier now became explicitly clear: More guns means less butter.

The U.S. market showed little exuberance; capital-goods expenditures were sluggish; the private sector, generally tentative. Service industries did grow fairly well; but they don't buy many oscilloscopes.

Federally funded programs suffered, ranging from education to aerospace; some ran dry and went begging. And, of the military budget itself, a larger share went into the hardware of combat, a smaller portion into sophisticated technical development, including electronics.

But, balancing the sponginess at home, Tektronix overseas business was very good.

Countries where sales were strongest included the United Kingdom, France (despite its late-year turmoil), Switzerland, Germany—and particularly Japan, a healthy and very competitive oscilloscope market. Sales of both Beaverton-made and Tokyo-made Tektronix products grew significantly.

In almost no market country of any significance did our sales fail to increase. (And Tektronix does business in over 100 countries.) Nor was this growth confined to technically advanced nations.

In fact, the strong market in less developed countries—markets outside the major economic blocs—is especially encouraging for our future, and hints that these nations intend not a gradual development but a rapid technical bootstrapping.

In these countries, the educational market for our lower-priced Telequipment line has grown. In fact, demand for those instruments generally is very healthy; one difficulty we face is recruiting Telequipment production employees in a very tight London labor market.

The main factor that held our sales up was a pretty prosaic one: Continued demand for portable oscilloscopes.

But other instruments introduced during the year had a significance sometimes exceeding their dollar value. They included:

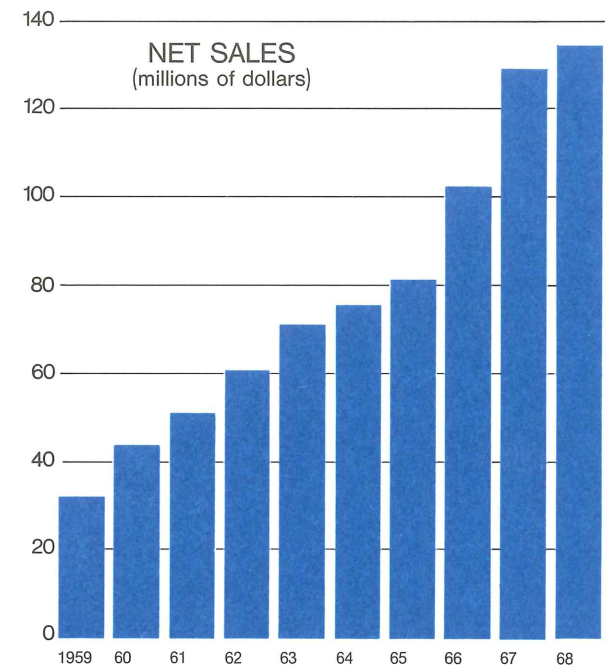
- *Display units.* We've delivered only a few of our types 601 and 611 units, which display computer-stored information. But they have created a lot of excitement in the computer industry, and early interest is very gratifying.

The 611's screen is 11 inches diagonally; the 601's, five inches. (Tektronix this year also introduced the type 602, a non-storage monitor. Unlike the others, it is not designed specifically for computer use.)

The storage unit is a major breakthrough in the key problem area of future computer usage: "Man-machine interface". That means some way to let humans "converse" directly with a computer, often at terminals remote from it.

Our storage-tube technology—first developed for oscilloscope CRTs—offers the industry a display unit that gives a simple, low-cost, non-flickering picture of words, numbers and graphic information from a computer's memory.

To date, development of remote computer terminals has been at least partly stymied by lack of simple display devices. The industry has had to rely on what are called "refreshed" cathode-ray tubes. Here the displayed information must be electrically "rewritten" all the time it is being read—a costly and cumbersome process. By contrast, with Tektronix' proprietary storage tube, the message is written *once*; the tube itself retains that information as long as needed.



Availability of storage units may serve a pump-priming function, enabling the industry to conduct large-scale technical and market research into terminal systems. The growth of those systems—giving many people simultaneous remote access to computer information—should in turn stimulate larger markets for display units.

Thus the self-regenerative characteristic of the oscilloscope market may also prove true of display units. Oscilloscopes often have made possible new avenues of technology that in turn have become large scope users—radar, space research, computers themselves.

The promising opportunity to achieve a good share of this possibly huge new market must, however, be seen in perspective. Competition is very keen; storage is by no means the certain answer to display; and the technical and production obstacles in this new product area are formidable.

But at this time we are optimistic.

- *Television instruments.* Two new all-solid-state instruments were introduced to meet the increased requirements of the television industry. They will, we are confident, become the industry's standards, as are the present Tektronix instruments. The type 528, a waveform monitor, complements the type 529; the type 520, a vectorscope, replaces the type 526. Both new instruments have taken into account the added requirements of color programming, which in a few short years has become not the exception but the rule in broadcasting.

The 520, in particular, which was brought out in the absence of any competing vectorscopes, typifies Tektronix' attitude toward product innovation. Our policy, to develop instruments whenever we can discern a present or future need and meet it, rather than merely react to competitive pressures, has had one result worth noting: Usually the thing that makes a Tektronix product obsolete is another Tektronix product.

LIKE ALMOST ANY TELEVISION studio you might walk into, Portland's KGW-TV relies on Tektronix TV instruments to help insure the quality of the transmitted video signal. Numerous type 529 waveform monitors are shown here.



PROGRESS IN OSCILLOSCOPE portability is graphically shown here. Type 453 portable in background, small and lightweight as it is, dwarfs the battery-operated SONY/Tektronix 323, introduced this summer.

- *The physiological monitor.* The type 410 monitor is Tektronix' first product designed to meet the needs of clinical medicine (although our general-purpose instruments have long been essentials in laboratories and biomedical research.) Response has been excellent to this instrument, which monitors the Electrocardiogram (EKG), pulse and brain waves of patients in surgery with both a visual display and an audible beep.

This product has introduced Tektronix to a field of users not previously acquainted with us or, in many cases, with the medical capabilities of electronic instruments.

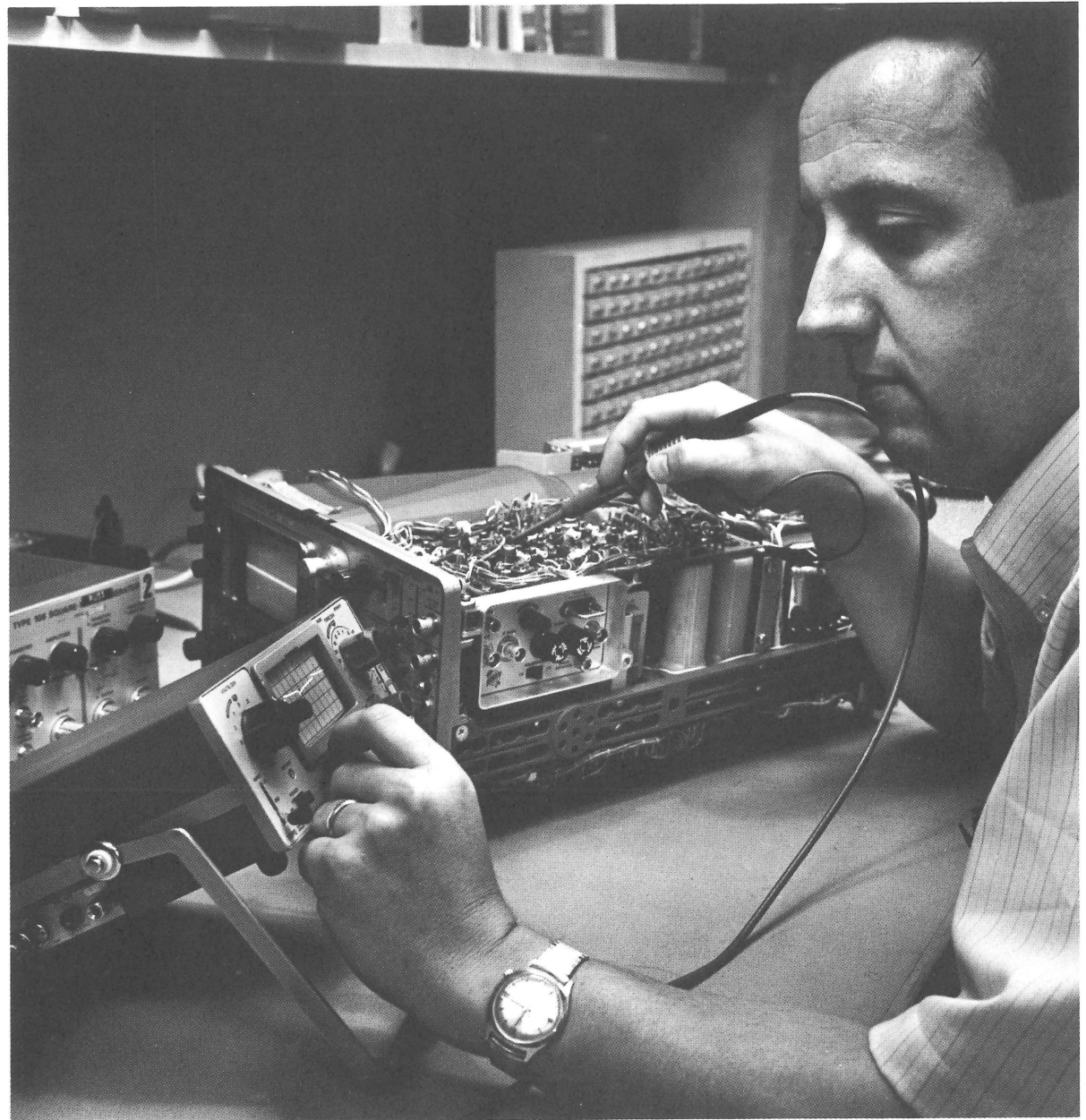
- *Sampling instruments.* Tektronix brought out 10 new sampling products last year, and added two more this summer, including the S-4 sampling head, which, used with the type 3T2 random-sampling plug-in unit, gives us the world's fastest sampling system. Its risetime of 25 picoseconds is about the time it takes for light to move a quarter of an inch.

Sampling remains the only practical way to obtain displays of very fast repetitive waveforms—exceeding the speed of conventional, so-called “real-time”, oscilloscopes by around 200 times. Users include computer-logic designers or anyone making or using high-speed repetitive pulses. Laser research is one example.

In sampling, the oscilloscope re-creates a graph of the waveform by assembling successive bits of a repetitive signal too rapid to be completely displayed while it happens.

Our S1, S2, S3 and S4 sampling heads are plug-ins within plug-ins. They allow great convenience of use—enabling the engineer to make both the most routine and the most advanced measurements by simply changing the heads. No competitive system offers this rapid interchangeability. And, it costs only about half what competitive paraphernalia does.

- *The 323 portable.* Introduced at year's end, this very lightweight portable is the first SONY/Tektronix instrument. It combines the oscilloscope knowledge of Tektronix with the miniaturization



know-how of SONY. The instrument stands 4½ inches high and weighs only seven pounds. The early order level suggests that the 323 will meet the needs of electronic service and repair men, who like an instrument that's easy to carry around.

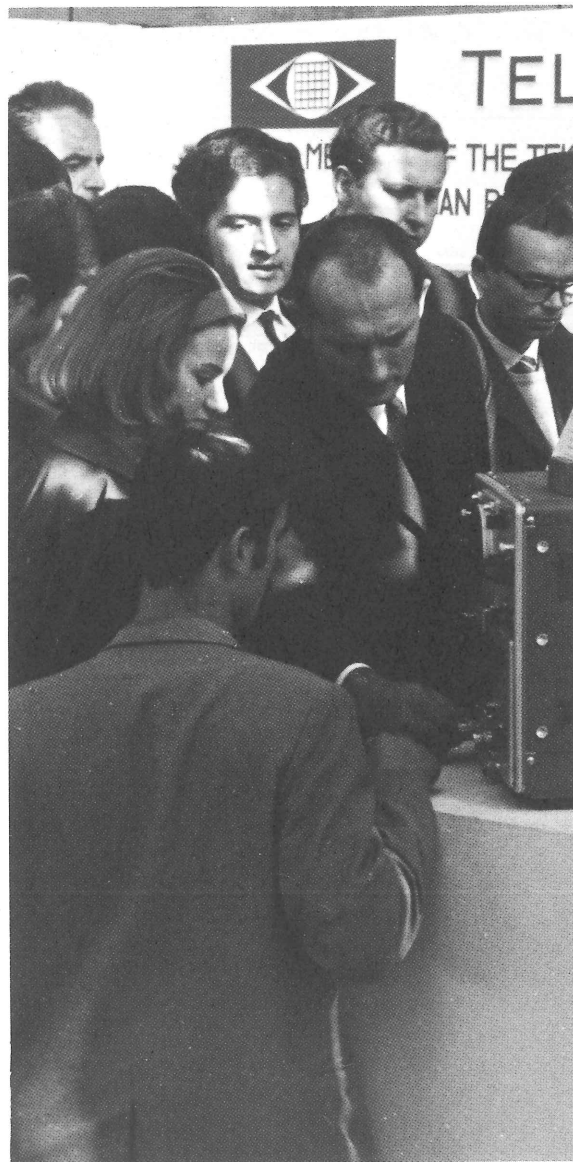
The 323, a new mark in high-quality portability, advances the established Tektronix leadership in battery-operated oscilloscopes, pioneered in our type 321 and furthered in our type 422.

Other product sales of more than routine interest included these:

- *Spectrum analyzers.* Sales of this instrument line, a Tektronix product since 1964, increased last year by about 95 per cent. In addition to self-contained instruments, we produce plug-ins that, for a fraction of the full instrument cost, convert our oscilloscopes into spectrum analyzers. The plug-ins are compatible with storage.

These instruments analyze complex electrical signals on their CRT screens, much as oscilloscopes do. But, a scope pictures a waveform of voltage versus time; the spectrum analyzer displays amplitude versus frequency. It is particularly useful in analyzing signals too complex to be meaningfully displayed on an oscilloscope, by breaking them down into their component frequencies. Spectrum analyzers also can work with much smaller signals than oscilloscopes can. Thus the two instruments complement one another, providing a great breadth of testing capability for all sorts of electronic equipment. Typical spectrum analyzer uses are in communications, electronic countermeasures, and vibration and radio-frequency-interference studies.

- *Telequipment instruments.* This year Tektronix' field staff took over the U.S. marketing of Telequipment instruments—with the expectation that Telequipment sales in this country will multiply. These products, in a lower price and performance range than the Tektronix line, are meeting the anticipated acceptance—from customers with less sophisticated instrument needs: Consumer-oriented users, such as radio and television shops; schools; and the developing nations.



STUDENTS flock around demonstration of Tektronix and Telequipment oscilloscopes at 14th annual International Electronics Fair, held at Ljubljana, Yugoslavia, in October.

- *Systems.* Sales of systems continued to increase. These complex assemblies of coordinated Tektronix instruments are used for automatic testing of transistors and integrated circuits.

With the S3100, introduced this year, Tektronix now can offer the customer a complete system; or he may build his own, to suit his particular needs, from digital oscilloscopes and other Tektronix catalog items.

Steps were taken this year to strengthen our marketing effort, here and overseas:

We added seven U.S. field offices, bringing our total to 48; the field organization itself grew from 290 to 310 people.

Direct marketing activities increased, as we have noted. SONY/Tektronix assumed that responsibility in Japan, and our domestic organization—with no additions of personnel for that purpose—began marketing Telequipment instruments in the U.S. Both moves have resulted in enhanced sales. In its first complete year as our French marketing subsidiary, Relations Techniques Intercontinentales (RTI) turned in an impressive performance.

Coupling our field organization with Telequipment instruments allows us to serve customers we didn't have before, and provide a spare-parts service, from strategically located field offices. Another benefit from the acquisition is that we gained an area of independent instrument development, backed with engineering.

Naming an assistant international sales manager this year has begun to bring about a closer relationship between our overseas operations and the variety of Beaverton marketing outlets.

Trade exhibits were held in Yugoslavia; London; Paris, and Hanover, Germany. Participation in a government-sponsored mobile trade fair in South America showed our instruments in areas where such a representative display had never before been presented.

The Year Inside: A Reprise

The winds of change are capricious, in the area of economic enterprise as elsewhere. For this reason, a major Tektronix goal has always been flexibility—to make sure that, as we grow, we do not lose the suppleness that means survival in a technological society of rapidly shifting configurations.

Tektronix, despite its size, is a highly responsive company, a characteristic that has never been more of an advantage than today. For times are changing—as they always have, far back into prehistory, when dinosaurs thrived, then faltered and finally, through unplanned obsolescence, died out, leaving their bones in tar pits.

Today's "dinosaurs" are all around us: A general geared up to fight yesterday's war, a company too rigid to respond to today's changing demands, an individual who chooses to stop growing, all will become "extinct," for the world will pass them by.

It used to be that a conventional way of showing what a corporation "looked like" was to draw an organizational chart in the form of a pyramid of blocks. But that chart hardly fits any more; it is itself a "dinosaur" of sorts, on its way to extinction.

To accurately depict the Tektronix of today, an "organizational chart" would need height, breadth and depth; be in continuous motion, and never repeat. Like a kaleidoscope display, only in three dimensions.

Our company's task is a tough one: It must structure itself to operate efficiently, yet it must at the same time "stay loose" so it can respond to any change it may face. This tricky balancing act will succeed only if the company has the right kind of people. That is, people who themselves are willing to change, eager to grow.

It has been our continuing good fortune to have just such people, and in abundance. Over the years, they have been our one indispensable asset—and the source of our deepest pride.

Education and Training

To complement our employees' search for new knowledge and fresh insights, Tektronix has tried

to foster an atmosphere that stimulates self-renewal. This emphasis is seen in our large and growing education and training programs. We believe, increasingly each year, that there is no more important long-term investment.

This year over half our total work force took part in some formalized learning experience. In our own internal education program, course registrations came to over 4700, in subjects ranging from job-related skills to broad individual development. In addition, nearly 1000 employees completed courses outside the company, aided by tuition refunds.

Our former Administration building, extensively remodeled, is now devoted exclusively to education and training. In addition to classroom and laboratory space, "Tek Tech", as it is good-naturedly called, has a video room and facilities for telelectures.

Classes are taught by carefully selected instructors from more than a dozen Oregon and Washington college and university faculties, from other educational institutions and from private professional practice—as well as Tektronix personnel with specialized skills and experience, and the proven ability to impart them to others.

A large portion of the Education and Training Center is occupied by Marketing staff responsible for technical training, both of our own field engineers and of customers' technical personnel. This year we doubled our customer-training capacity.

Nowhere outside Tektronix is there a course that comes anywhere near the intensive 120-hour instruction in scope use and maintenance that we offer, free, to customers' engineers and technicians.

How valuable is this training? One large U.S. corporation this year gave a hint in a recruiting advertisement. What they wanted to hire, the ad said, was engineers who had completed the Tektronix oscilloscope course.

In-line training programs, devoted to changing jobs and processes, also gained impetus this year.

For, when all's said and done, technology can change no faster than the technologist.

This summer, Tektronix reinforced its commitment in this general area, by naming a senior management representative to direct our educational activities, and to develop an even broader and richer program.

Mark 1968 as a year of learning.

Tooling Up

Growing in size is easy to detect. Growing in strength is more difficult to measure. This year an already robust Tektronix became technically and organizationally stronger.

Our financial success in a difficult year may veil the fact that a great share of the company's energies went not to solve the stubborn problems of 1968 but to enable the great potentialities of years ahead.

Because it has been our policy not to disclose our instrument details until they have been incorporated into new products, it's not possible to discuss the exact meaning of many of these internal activities. But they were major; they will be very far-reaching; and you as a shareholder should know about them.

- *Component development.* As scope technology becomes more refined, and the demands on it more strenuous, advanced instrument performance is often impeded by the limits of one or more critical component parts. This year, we strengthened our base in Tektronix-made components, including innovative ones. An Advanced Component Development organization was formed, and has this responsibility.

Our integrated-circuit laboratory continued to exceed our expectations, with the development of high-quality ICs for unique oscilloscope needs. These ICs will be incorporated into future instruments.

- *Advanced equipment.* Expenditures for laboratory instrumentation went up, as we again added

ELECTRICAL DISCHARGE milling machine, typical of advanced shop equipment used at Tektronix, makes use of one of our own oscilloscopes.

to our essential physical and chemical support staff.

New techniques and process improvements were developed by these technicians, and soon will be applied to our assembly lines.

In our components plants, much production machinery was upgraded. Often the first machines for a particular job must be adaptive and self-designed. Then, as process needs become clearer, they call for equipment specially made for the need at hand.

There is still *much* to be done in this area, due to radically changing manufacturing requirements.

In our assembly plants, production equipment is under continuous study and experimentation. Our unique needs—plus the twin demands of automatic processes and short setup time—make it necessary for us to build (or modify or combine) most of our own assembly machinery. Equipment manufacturers have often complimented the creativity of our machine-design engineers, and several of the modified systems we've developed have been publicized in trade and technical magazines.

- **Automation.** Automatic component insertion was expanded, with the addition of more insertion machines. Our flow-soldering machine, replaced here with a larger one, was put to use in our plant in The Netherlands.

The year also saw growing use of computer-tape-controlled equipment in both fabrication and assembly areas. Increased use of our own etched circuits has enabled the development of a Tektronix-designed semi-automatic in-process testing system, increasing both the speed of tests and the reliability of the instrument.

These moves, increasing our efficiency and easing our hiring needs, are also very much in line with Tektronix' long-held belief that machines should do machine work, and people do "people work."

- **New buildings.** Tektronix this year added 101,678 square feet—about 2½ acres—to its total of building space owned.



Buildings included the two-story 84,000-square-foot Operations Center, which houses a variety of administrative and support activities; a 7800-square-foot addition to our Ceramics plant, and two field offices, one in Boston and one in Albuquerque.

An addition to our Electrochemistry plant also was approved. Construction of the 60,000-square-foot building, which will double present plant size, has begun.

Overseas, a 35,200-square-foot manufacturing structure on the Isle of Guernsey, is nearly completed as is a new headquarters building for Tektronix Australia Pty. Limited in Sydney.

In France, we received a permit to construct a new 26,000-square-foot building for Relations Techniques Intercontinentales, our Paris marketing subsidiary. Telequipment Ltd., our subsidiary in London, purchased a 13-acre site and buildings, and has set up manufacturing operations in part of it.

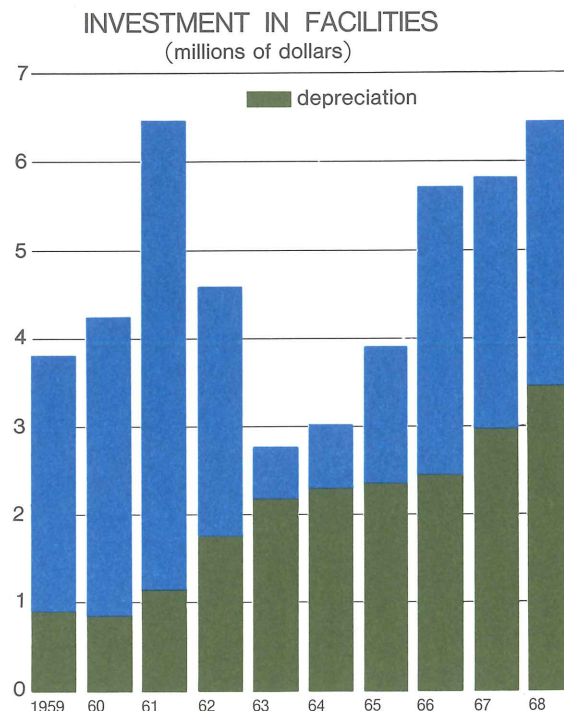
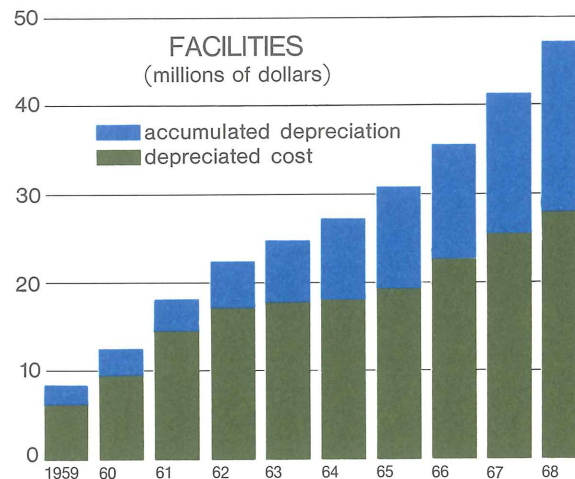
Worldwide, Tektronix now occupies 1,698,000 square feet of buildings.

Most of this year's new buildings, plus all the ones now being planned, look to future activities—that is, advanced processes and instruments—rather than being, say, merely additional production or storage space or extensions of current functions.

• **Minority Hiring.** Our employment program, which always has sought out potential ability wherever it could be found, this year put particular effort into minority hiring, as national concern deepened over the "hard-core"—the chronically jobless.

Portland, with a small minority-group population, still exhibits many symptoms of other cities, particularly the plight of the ghetto Negro: Few jobs, restricted housing and the rigid attitude of a still-too-large segment of the majority community. Not all these problems will be solved right away, but Tektronix is actively committed to an accelerated effort in this regard.

This year, we nearly doubled the number of full-



time Negro employees, and stepped up our recruiting program in the Negro community itself.

The rise of two new organizations focusing on these problems, the National Alliance of Businessmen and the Urban Coalition, has provided channels through which we may work with other companies. Our president is a member of the local Coalition steering committee; we have contributed a full-time loaned executive to the Portland NAB; and many other employees are involved in formal or informal efforts to improve job and housing opportunities for those whom society may have side-stepped.

In one NAB program, Tektronix has hired 80 disadvantaged high schoolers for summer work. Another closely related program is a work-study arrangement, under which the youngster is employed half-time at Tektronix for as long as he remains half-time in school.

Whatever contribution these efforts may make to help solve community problems, one result already has shown up: That is, Tektronix has added to its number of alert, competent and hard-working employees.

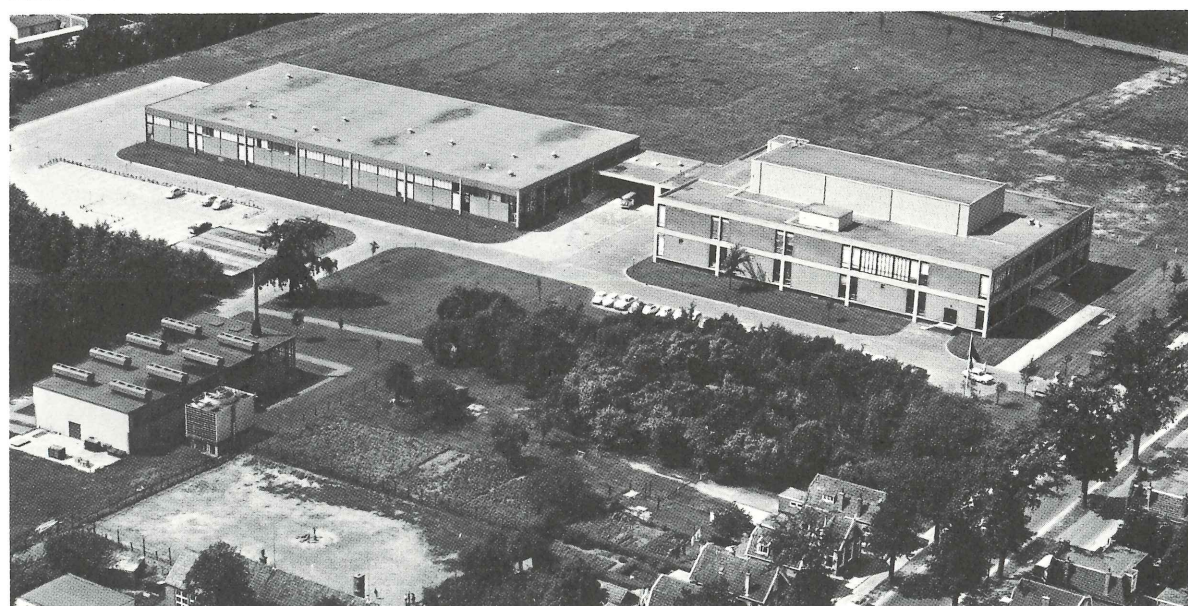
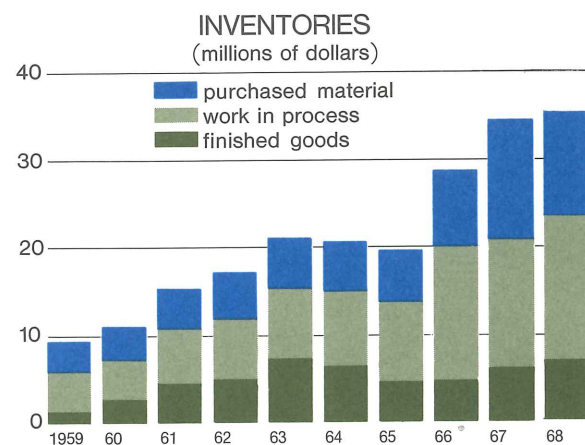
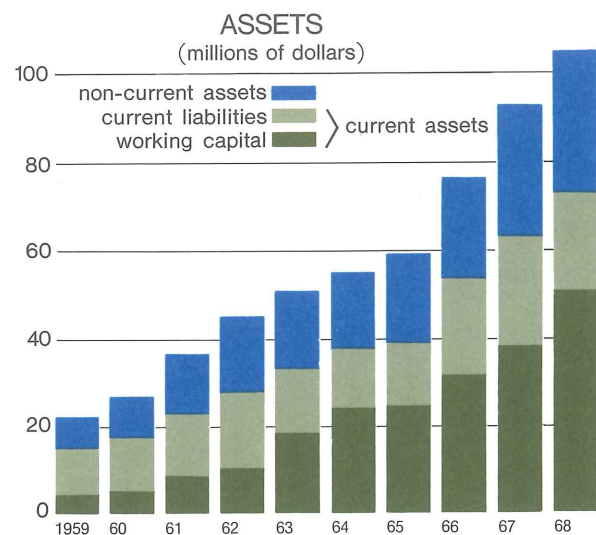
Rigid and repressive social/economic patterns, so long in congealing, will not dissolve easily. But Tektronix, in the year ahead, will continue to seek broad and creative approaches to as many aspects of the problem as we can reasonably hope to affect.

• **Tektronix vs. U.S.** Some of you may remember Tektronix vs. U.S. It is the name of our lawsuit in the Court of Claims, begun in 1961, against the U.S. government for infringement of eight of our patents by government contractors.

We had looked for the Court's decision by early 1967. We are still anxiously — and hopefully — awaiting a favorable judgment.

• **Financial aspects.** Doing business overseas, always susceptible to the whims of governments, this year grew more involved than ever—and some of the obstacles are stateside.

84,000-SQUARE-FOOT OPERATIONS CENTER, (foreground) is the most recently completed building on Tektronix' 300-acre industrial park near Beaverton, Oregon. This year Tektronix added 2 1/3 acres of building space, used for manufacturing, technical and support activities.



Aerial view of our manufacturing plant at Heerenveen, The Netherlands.

The President's restrictions on direct foreign investment will limit the earnings we may retain and invest abroad, to a figure based on 1965-66 standards. Beyond that, we must borrow overseas—a move less onerous to companies that continuously borrow; but we do not. Borrowing we otherwise would not do, will cost us the difference between the interest we're charged and the return we'll get on that money invested elsewhere.

The British pound was devalued, but we were hardly hurt; our assets and liabilities in sterling tended to cancel each other out.

Devaluation could happen again, in more than one currency. The best a company can do is be alert and try to keep its financial position as invulnerable as possible.

Surtax, devaluation, repatriation and other financial complexities influence not only how an international company organizes, but also whether it makes a profit. Thus each new factor requires studious deliberation.

Tektronix this year took its stand in opposition to an upsurge of protectionist sentiment in Washington. Our position is foursquare in favor of free trade.

NEW HEADQUARTERS building for Tektronix Australia Pty. Limited (top), to be occupied this summer. Australia also boasts the distinction of having Tektronix' most remote field office, that in Adelaide, shown here. Tektronix field offices are situated in six foreign countries and in 48 U.S. locations, providing close customer contact, instrument maintenance and technical assistance.



Vertical Integration: An Essential

Early oscilloscopes for the most part used existing electronic components, and relied on skilled circuit design to take fullest advantage of those components—thus enabling instrument advances that met the measurement needs of the time.

But the electronics industry grew. Its measurement requirements became more stringent—for advances in scope bandwidth, precision, timebase accuracy, ease of use, reliability and low cost. Tektronix soon found that improving circuitry alone was not enough; and that oscilloscopes making do with off-the-shelf components were about as advanced as they were going to get.

It wasn't always that commercial suppliers *couldn't* produce the necessary specialized parts and pieces; but they had little incentive to put developmental effort into meeting the unique, difficult short-run needs of the very specialized oscilloscope business.

An early hurdle in the way of developing better scopes was the limitation imposed by existing cathode-ray tubes. So Tektronix decided in 1951, against the advice of nearly all in the industry, to design and produce its own CRTs. Our success since that time has been significantly enhanced by the results of this decision.

Instrument complexity grew, as did measurement requirements. As the world leader in oscilloscope development, Tektronix found these demands particularly insistent. As increasing performance needs overtook and then exceeded the capabilities of one commercial component after another, Tektronix undertook the development and production of its own.

As a result, we have been able often to produce lower-cost components, as well as many with unique characteristics. Also we have enabled otherwise impossible instrument performance, by being able to tailor not only the circuitry but also the components themselves to the ultimate purpose of the oscilloscope system.

Vertical integration, brought about by necessity, has admittedly contributed to the complexity of

TEKTRONIX DESIGNED AND BUILT in-process testing system for partially assembled oscilloscope chassis speeds up the testing process and helps insure the high performance of the final instrument.



our organization. But it has also become one of our greatest competitive assets. So great is the variety of technical "bench strength" we have thus developed that Tektronix has great flexibility. A change in objective can bring many diverse skills rapidly to bear on a problem area without our having to build up a costly and specialized exploratory activity.

It has an additional benefit. Often, branching out into new technologies to overcome a particular problem has resulted in important offshoot discoveries that we have put to useful work somewhere else in our broad developmental programs.

This mushrooming feature of vertical integration is somewhat unpredictable, in that you never can tell what it will uncover, or when. But here is just one example, of a great many:

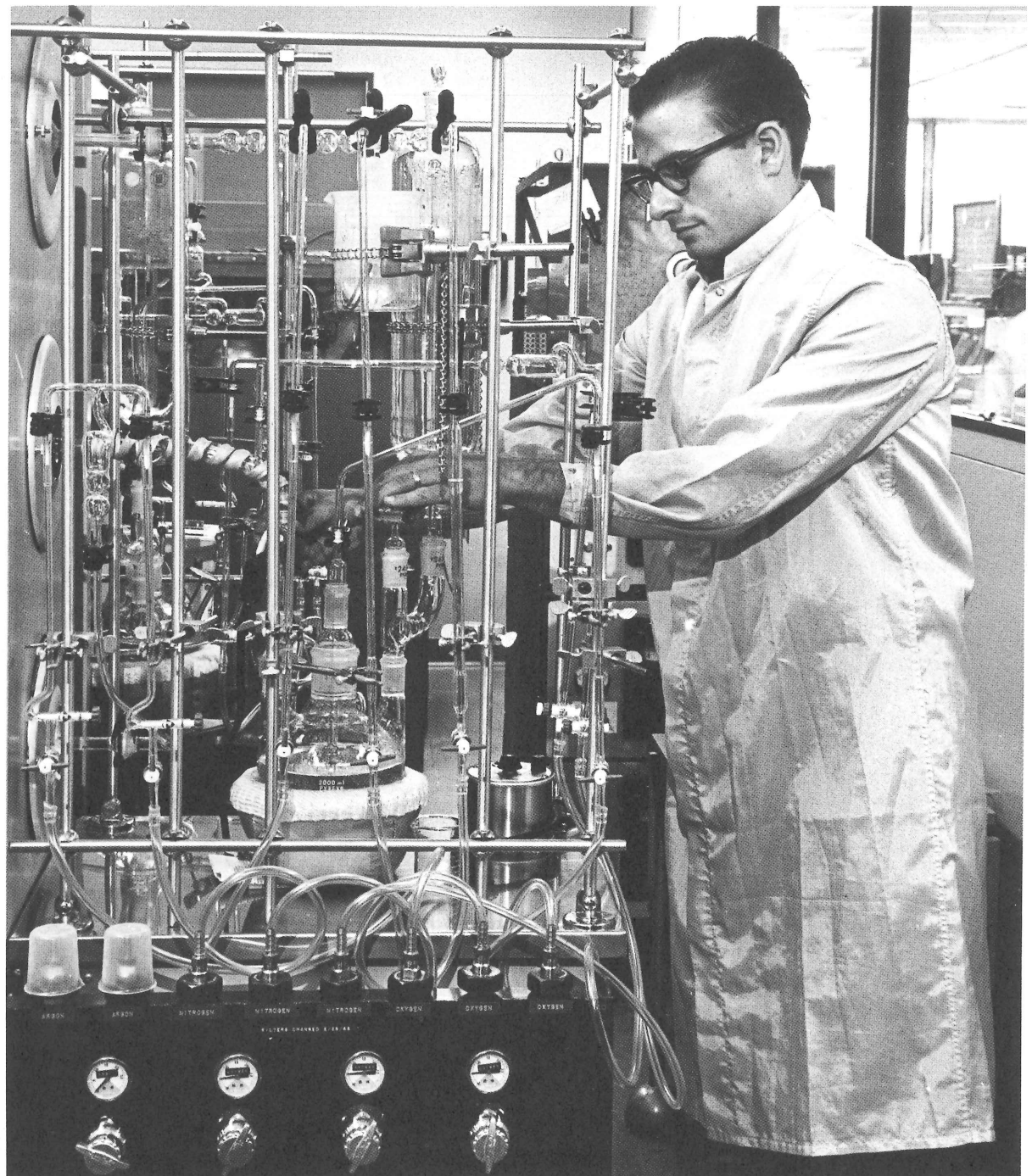
In our efforts to produce easy-to-maintain, well-packaged scope subassemblies, Tektronix early developed ceramic terminal strips for mounting electrical components. To manufacture them, a ceramic technology was built up.

In developing the 564 oscilloscope in 1962, we designed a rugged, low-cost CRT that would store the electronically written image.

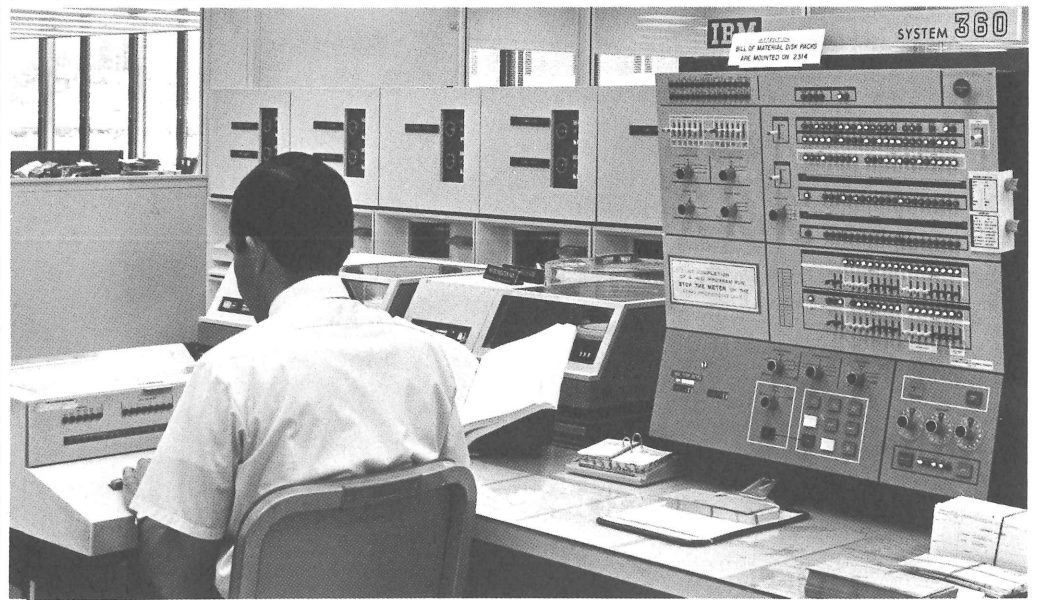
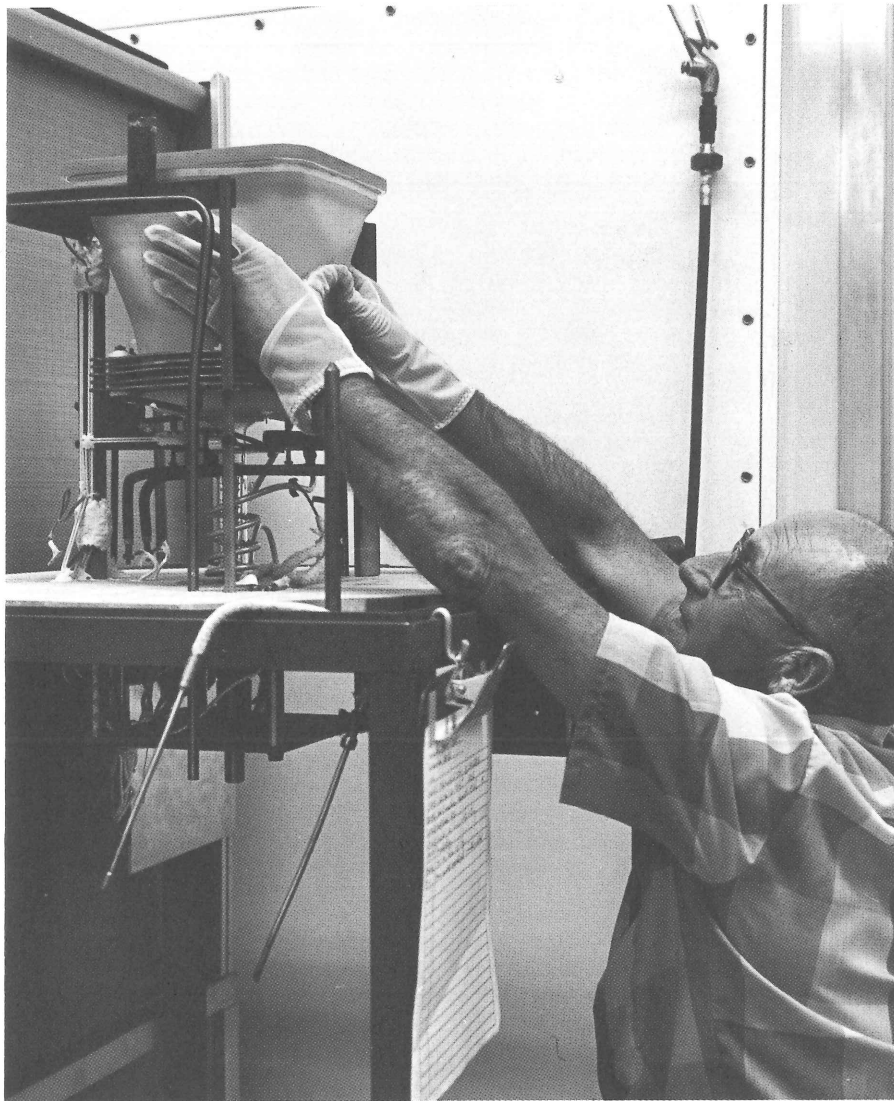
This year, it was a combination of those two offshoot developments that made possible the large ceramic-funnel storage tube, the key component of our promising new product, the 611 display unit.

Tektronix today manufactures not only its own CRTs and ceramic envelopes, but also transformers, super-speed diodes, precision resistors and capacitors, plastics, panels, special-purpose cable, etched circuit boards, integrated circuits, mounting strips and other ceramic parts, potentiometers, delay lines, sheet-metal and screw machine parts, and CRT phosphors. This year we added the capability of making hybrid devices and precision electromechanical parts.

Vertical integration runs even deeper than this list indicates, for many of these components depend on a strong backup of physical, chemical and material support groups. For example, our excellent process-development laboratory helps insure that these parts can be produced in quantity; that yields will be economically reasonable, and that quality will not fall short of high Tektronix standards.



MANUFACTURE OF a precision laboratory oscilloscope is the result of a wide variety of highly developed specialty skills and processes. Four are pictured here: (left) Process equipment in our integrated-circuit laboratory; (below) manufacture of 11-inch ceramic envelope for the type 611 display unit's storage cathode-ray tube; (top right) semi-automatic flow-soldering machine in an assembly plant; (bottom right) disk-file system, allowing random access to computerized manufacturing information in our data-processing area.



Today's Tektronix: A Snapshot

A report like this is a sort of stop-motion picture of what can only be understood as a continuum. Those factors that are constants—corporate philosophies and policies—could be described *any* year, and those that are specifics are often obsolete by the time you read of them.

But, a snapshot of Tektronix today does give some idea of its dimensions.

The company manufactures over 80 models of oscilloscope, about 75 types of interchangeable plug-in units, a growing line of spectrum analyzers, three display units, about 38 other auxiliary instruments and a variety of optional oscilloscope accessories.

At Heerenveen, The Netherlands, we manufacture 30 models of oscilloscopes; at Tektronix Guernsey Ltd., 48 models; and at SONY/Tektronix in Tokyo, 17 models of Tektronix instruments and the SONY/Tektronix 323 portable. Telequipment, in London, makes 12 models.

Over its 22 years, Tektronix has considered many avenues of product diversification. However—other than entering the spectrum analyzer market in 1964 and the display unit market this past year—we have chosen to avoid dilution of our technical effort and to concentrate on continued improvement of the cathode-ray oscilloscope, a more profitable area. This choice, which sometimes brings shareholder questions, is best understood by realizing the extreme diversity of oscilloscope uses.

As an illustration: Each year Fortune magazine publishes a list of the largest 500 U.S. industrial corporations. Of this year's list, spanning the whole of economic endeavor, 72 per cent are Tektronix customers. That includes the 25 leaders.

The oscilloscope is the major and most common instrument of the electronics industry. Principal customers are private industry; military and non-military agencies of the United States and foreign governments; educational institutions; computer manufacturers; and, to a lesser extent, radio and television stations. But the ability, through the use

of transducers, to convert pressure, gravity, heat, acceleration, sound, light and chemical phenomena into measurable electrical signals has extended the use of this instrument far beyond the electronics industry.

Continued leadership in instrument manufacture requires continued growth in research, engineering and design of products and techniques. About 1/10 of our sales revenue is returned each year into these activities.

To gain a closer and better relationship with customers, Tektronix began early to develop its own sales organization, after first selling through distributors and commission agents.

Our first field office was set up in New York City in 1951. Today there are 48 in major U.S. market areas, staffed by technically competent, factory-trained, salaried employees. Twenty-two offices are also customer service centers.

Diversified oscilloscope use offers insurance against a decline in need by any single user or market segment. Also, the global dispersion of our market lessens the effect of slumps in any one geographic sector.

Our overseas marketing began in Sweden in 1948. International sales have grown to one-third of Tektronix business—a greater ratio than that of any major electronic instrument company we know of.

Tektronix Canada was incorporated in 1961, a wholly owned marketing subsidiary. Others have followed in Australia, The United Kingdom, Switzerland, France and Japan.

Tektronix distributors and representatives are situated in 36 Free World countries. In addition, 16 field offices serve Tektronix and Telequipment customers in Canada, Australia, France, Switzerland, The United Kingdom and Japan.

Our first overseas manufacturing effort was on Guernsey, in 1959, established to meet the needs of the European Free Trade Association. Our plant in Heerenveen, The Netherlands, serving the European Common Market, followed in 1962.

In 1965, with SONY Corporation, Tektronix formed SONY/Tektronix, a jointly owned subsidiary in Tokyo. The company manufactures and markets Tektronix instruments in Japan, and this year developed its own first oscilloscope.

Domestic manufacturing, engineering and marketing operations (other than these in the field) are concentrated in a 300-acre industrial park near Beaverton. There are currently 16 major buildings in the park—for engineering, assembly, component manufacture, fabrication, research, warehousing, administrative and support activities.

The company also owns two buildings totaling about 100,000 square feet on a 14-acre tract three miles northwest of the park; two plants on 11 acres on Guernsey, comprising 107,000 square feet, and an 82,000-square-foot manufacturing plant on 23 acres in Heerenveen.

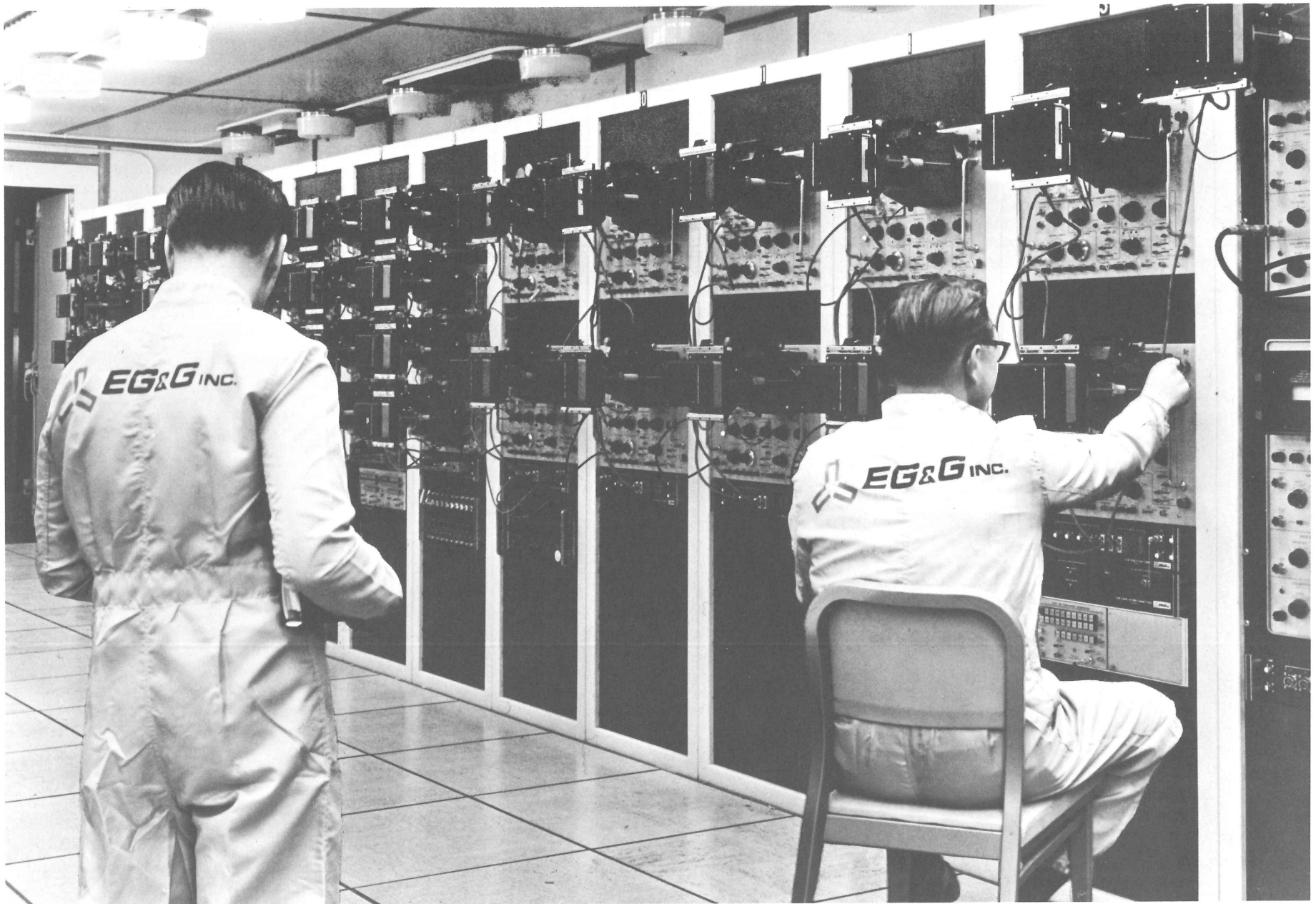
The decision to manufacture overseas has been proven necessary; and the selection of the locations, judicious. This year particularly; one aspect of growing nationalism is an emphasis on domestic industry in many European nations; "Buy-French", for instance.

Building oscilloscopes overseas gives us a more nearly competitive break with local manufacturers in those geographic areas. Otherwise, those competitors would have been more free to develop strength that might challenge us in others of our markets. Even our strong U.S. position is partially a result of our overseas manufacturing. Also, our substantial Beaverton export activity is undoubtedly greater than it would have been had we left overseas markets more open to foreign manufacturers, by failing to set up our own operations there.

Tektronix at year's end employed 7852 persons: 6031 at Beaverton; 324 in its U.S. field offices, and 1497 internationally. Last year we added 582 employees.

Over the years we've tried to encourage stable, long-term employment; for, all things considered,

EXTENSIVE RECORDING equipment in the data room at EG&G, Inc. helps conduct vulnerability studies for the U.S. Air Force. Count the Tektronix oscilloscopes and scope cameras.



it is the experienced, trained and dedicated employee who most greatly benefits the company. To make Tektronix' fortunes a rewarding concern of each employee, we offer a variety of incentive programs, including profit sharing and employee ownership.

The results have been good. Of the 4948 persons who were employees five years ago, 3617 (or 73 per cent) are still with us; of the 1420 here 10 years ago, 913 (or 64 per cent) remain; of the 361 who worked with us 15 years ago, 195 (or 54 per cent) still are employees. And six of our employees today were among the 21 persons here two decades back.



DIAMOND TIE-PIN and other momentos are presented to a Tektronix employee in appreciation for 20 years of dedicated service.

1969: Tomorrow

The future in general looks bright. The future in particular—that is, the year ahead—is harder to decipher, confounded as it is by the “ifs” and “maybes” of devaluation, taxes, politics and war. But, we look for more roses than thorns.

A semi-wartime economy, possibly an erratic stimulus to some segments of business, is a depressant to Tektronix markets; we neither make war materials nor do we deal in direct government contracts. Barring an outbreak of peace, our assessment of the U.S. market in the year to come is: More of the same.

Still, one of the largest influences on our markets has always been our input into them, of significant new products. We will try, in the year ahead, to make that influence increasingly felt.

Should peace be attained, erstwhile war dollars would be freed for federally supported research and development, and education. Companies doing R & D work would need more oscilloscopes; and one effect of increased educational funding should be increased demand for our schoolroom-priced Telequipment line.

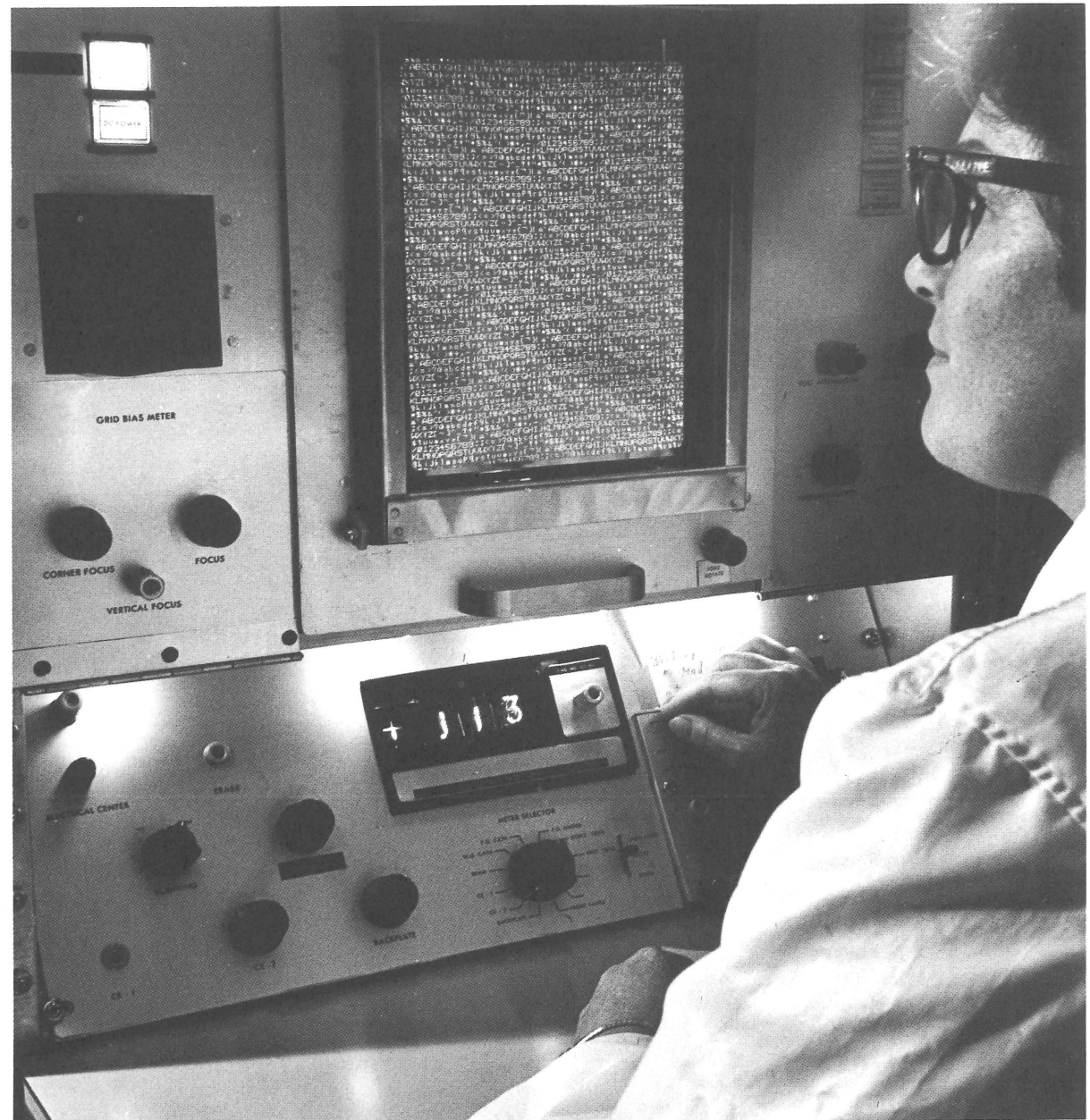
Overseas, indications are for continued substantial growth next year in the oscilloscope market.

As to specific markets:

Medical uses will grow—provided that we continue, as we did with the 410 monitor, to produce instruments that meet a specific professional need; the same may be said for the industrial/mechanical market, for which we designed our recently introduced engine-analyzer system. In short: These markets will increase about as fast as we *make* them increase.

But our most exciting market — one that has the potential for explosive growth — is computer display. Customer interest in our 611 storage display unit is high, even though we have produced just a few of them; in fact, the unevenness and “hiccups” inherent in any new-product manufacture are still with us — and are the focus of concerted technical attention.

TYPE 611 DISPLAY unit's storage cathode-ray tube is tested for resolution of an alphanumeric display.

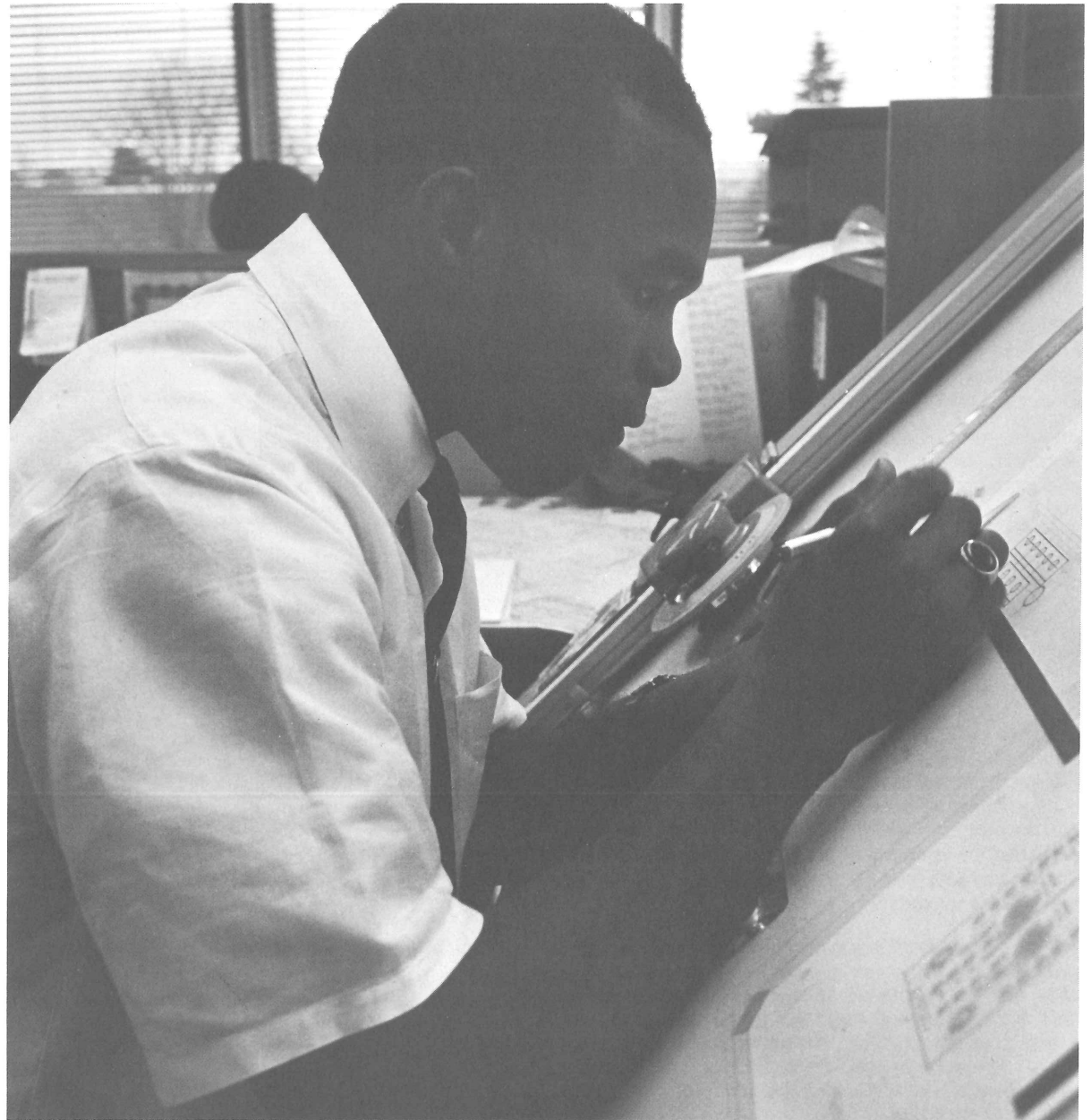


The immediate market is a sophisticated one — computer companies and computer-oriented scientific users. Recent speculation about the future of display suggests that other successively broader markets may appear.

But this is still conjectural. Our concern now is to capture our share of the first of these markets. The others are too distant, and the field too dynamic, for us to predict Tektronix' role. But storage, a capability unique in the field, gives us a clear advantage. We intend to pursue it to its utmost.

Whatever the future of information display, and whatever our contribution to it, our major effort will continue to be directed toward advancing our leadership in the oscilloscope field. For, in today's technically explosive world, there is *no possibility* that the market for waveform-measuring instruments will cease to exist; and the scope is by far the most useful of these instruments.

Should something else ever be developed that does the job better, we have every intention that the "something else" will come from Tektronix.



Tektronix Consolidated Resources Provided and Applied

The accounting year is the 52 or 53 weeks ending the last Saturday in May.

(THOUSANDS)

1966	1967	1968
\$14,181	\$19,455	\$18,422
11,052	13,389	13,429
2,456	2,991	3,436
80	197	470
391	548	620
202	100	127
—	586	123
—	1,644	217
6,931	11,678	7,329
5,705	5,803	6,464
43	749	565
69	3,546	25
76	372	275
898	1,208	—
140	—	—
7,250	7,777	11,093
24,667	31,917	39,694
31,917	39,694	50,787

This statement summarizes the origins of additional resources—the assets used in the business to which a monetary amount can be applied—and tells how the company used them.

THESE (additional) RESOURCES BECAME AVAILABLE FROM:

EARNINGS Net income after income taxes.

DEPRECIATION OF FACILITIES The amount deducted from net sales representing the decrease in value of buildings, machinery and equipment resulting from use, wear and age. These did not involve payments to outsiders, and most were computed by the sum-of-years-digits method.

AMORTIZATION OF INTANGIBLE ASSETS The amounts deducted from net sales representing the write-off of costs of intangible assets, which also did not involve payments to outsiders.

DISPOSITION OF TREASURY SHARES Net proceeds from sale of Tektronix, Inc. treasury shares to employees exercising stock options or as part of employee share purchase plan and value of shares used for acquisition of Pentrix Corporation.

RECOVERY OF COST ON SALES OF FACILITIES That part of the proceeds from sales of machinery and equipment no longer needed by the company, equivalent to the depreciated cost.

OWNERS OF MINORITY INTEREST IN SHAREHOLDERS' EQUITY OF SUBSIDIARY Portion not purchased by Tektronix, Inc. of shareholders' equity in subsidiary plus corresponding earnings of that subsidiary.

LONG-TERM INDEBTEDNESS INCURRED In 1967, portion of purchase price of acquired companies to be paid in instalments. In 1968, amount borrowed from a Swiss bank.

THESE RESOURCES WERE USED FOR:

ADDITIONS TO FACILITIES Cost of buildings, machinery and furniture purchased or constructed.

REDUCTION OF LONG-TERM INDEBTEDNESS Amounts becoming current liabilities due within one year.

INTANGIBLE ASSETS Amounts paid in excess of values ascribed to the net tangible assets of the companies acquired (goodwill).

INVESTMENTS Including cost of investment in and advances to 50% owned SONY/Tektronix Corporation and miscellaneous investments.

PURCHASE OF TREASURY SHARES Cost of Tektronix, Inc. common shares purchased.

OTHER

RESULTING INCREASE IN WORKING CAPITAL Added to

WORKING CAPITAL AT BEGINNING OF PERIOD Results in

WORKING CAPITAL AT END OF PERIOD

25

EXPLANATION OF FINANCIAL STATEMENTS

Corporate performance and strength are usually measured by financial figures, although they only tell part of the story. It is hoped the explanation included as part of the financial statements will assist shareholders unfamiliar with financial analyses to a better understanding of Tektronix.

Performance is usually presented on the earnings statement, which shows how much of the revenue, mostly from sales, can be kept by the company after paying the costs of goods sold and the expenses of running the business.

Strength is pictured by the financial condition statement, which shows the cost of the assets or resources used in the business and tells what part of them is owned by the shareholders and what part owed to creditors.

Another statement called Resources Provided and Applied is gaining more frequent use, and shows the connection between the other two state-

ments. Note that the first item on the resources statement is the earnings shown on the earnings statement. The last item is the working capital shown on the financial condition statement.

To best adapt to conditions outside the United States, Tektronix operates in Japan through a non-consolidated 50% owned company, and elsewhere through one majority controlled and several wholly-owned subsidiary corporations. However, a meaningful financial picture of Tektronix is gained only by consolidated figures.

The figures on the financial statements are rounded to the nearest thousand dollars.

We hope these explanations will contribute to better understanding, and lead to further clarification.

Tektronix Consolidated Earnings and Reinvested Earnings

The accounting year is the 52 or 53 weeks ending the last Saturday in May.

(THOUSANDS)

1966	1967	1968
\$101,759	\$129,031	\$133,656
44,733	59,511	60,330
57,026	69,520	73,326
37,770	44,484	48,154
8,745	9,548	10,713
9,223	10,428	12,365
8,992	10,764	11,534
10,810	13,744	13,542
19,256	25,036	25,172
(346)	(143)	70
(287)	(293)	(174)
61	192	29
(120)	(42)	215
19,602	25,179	25,102
8,550	11,740	11,550
7,097	9,725	8,802
620	750	800
833	1,265	1,948
11,052	13,439	13,552
—	50	123
11,052	13,389	13,429
39,733	50,785	64,174
50,785	64,174	77,603
7,984	7,970	7,998
\$1.38	\$1.68	\$1.68

NET SALES Amounts receivable for products sold. Tektronix sold directly to customers at retail in the U. S., Canada, U.K., Australia, Switzerland and France, and to distributors (including 50% owned SONY/Tektronix Corporation in Japan) at a discount, for resale in most of the rest of the world. From NET SALES are deducted

MANUFACTURING COST OF SALES Includes the cost of materials used in the products sold, the payroll costs of the employees who fabricated and assembled them, the payroll of their supervisors and those who assisted them, and the expense of running the manufacturing operations, leaving

GROSS PROFIT From which must be deducted

OPERATING EXPENSE AND PROFIT SHARING

SELLING Comprising payroll of field engineers and employees who assist them, commissions to some marketing representatives, advertising, travel, rent of offices, and the other expenses of marketing.

RESEARCH AND DEVELOPMENT Payroll of engineers, creators and those who help them design and develop new products and improve existing products, including supplies and all other related expenses.

ADMINISTRATIVE Including payroll of executives and personnel working on accounting, employment, data processing, facilities and communications functions, and the many expenses related to them.

PROFIT SHARING (Note 3) Which acts as an incentive for employees' performance by rewarding them with a share of the profits they are responsible for generating, leaving

OPERATING INCOME Which is (increased) or decreased by non-operating items

NON-OPERATING EXPENSE (INCOME)

GAIN ON DISPOSITION OF FACILITIES Amount in excess of depreciated cost recovered from sale of machinery and equipment no longer needed.

INTEREST EXPENSE Cost of borrowed money.

OTHER Including royalties, amortization of intangibles, one half the earnings of 50% owned SONY/Tektronix Corporation, leaving

INCOME BEFORE INCOME TAXES From which is deducted

PROVISION FOR INCOME TAXES Estimated income taxes of Tektronix, Inc. to be paid to the United States and some twenty state governments, plus estimated income taxes to be paid other countries, related to the taxable income of each subsidiary. Earnings have not been reduced by provision for income taxes that would be paid when subsidiaries distribute their earnings as intercompany dividends (Note 1). Deduction of income taxes results in

U.S.

STATE

FOREIGN

INCOME BEFORE MINORITY INTEREST From which is deducted

MINORITY INTEREST (Note 1) Share of earnings of one marketing subsidiary corresponding to portion of its equity not owned by Tektronix, Inc., leaving

EARNINGS The measure of company performance—the amount available to repay debt and expand business.

REINVESTED EARNINGS AT BEGINNING OF YEAR

REINVESTED EARNINGS AT END OF YEAR (Note 4)

COMMON SHARES OUTSTANDING AT END OF YEAR

EARNINGS PER COMMON SHARE Earnings for the year divided by the average number of common shares outstanding during the year.

Tektronix Consolidated Financial Condition

(THOUSANDS)

May 28, 1966 May 27, 1967 May 25, 1968

\$52,781	\$62,952	\$72,626
1,913	2,241	1,635
4,596	3,528	11,879
17,188	21,682	22,742
(135)	(125)	(130)
746	1,476	1,518
680	873	901
27,793	33,277	34,081
4,723	6,228	6,849
12,679	14,554	16,375
10,391	12,495	10,857
20,864	23,258	21,839
1,500	—	—
26	749	171
4,237	3,508	5,010
6,300	7,993	5,902
4,999	6,494	6,356
2,517	2,486	2,746
1,058	1,203	1,405
197	825	249
31,917	39,694	50,787
22,720	25,433	28,332
22,361	25,065	29,447
11,967	12,646	14,944
143	184	186
(13,061)	(15,724)	(18,836)
565	622	1,407
745	2,640	1,184
145	3,494	2,888
469	841	1,116
432	1,328	817
—	586	709
54,819	67,548	81,597
5,997	5,997	5,997
(1,963)	(2,623)	(2,003)
50,785	64,174	77,603

CURRENT ASSETS Those assets likely to be converted to cash or used in the ordinary operation of the business, made up of:

CASH Mostly in checking accounts or deposits in transit.

CASH EARNING INTEREST Invested in savings accounts, certificates of deposit, U. S. treasury bills, prime commercial paper or short term tax exempt securities.

ACCOUNTS RECEIVABLE Amounts due from customers for sales on credit.

ALLOWANCE FOR DOUBTFUL ACCOUNTS Estimate of erosion in value of accounts receivable because a few customers may not pay us.

PREPAID EXPENSES Amounts paid for things that will not be used and deducted until the following year.

SUPPLIES Items that will be consumed in operating offices, maintaining facilities and running manufacturing plants.

INVENTORIES, AT LOWER OF COST (FIRST-IN, FIRST-OUT) OR MARKET The cost of products finished but not yet sold; purchased materials and parts to be fabricated and assembled into products; and the materials, payroll costs and other costs accumulated in the process of manufacturing products not yet completed.

Consisting of:

Finished goods

Work in process

Purchased materials

CURRENT LIABILITIES Obligations due to be paid within one year, including

NOTES PAYABLE Amounts borrowed for less than one year.

CURRENT PORTION OF LONG-TERM INDEBTEDNESS (Note 2) Instalment payments due within one year.

ACCOUNTS PAYABLE Amounts due suppliers for materials and services bought on credit.

U.S., STATE AND FOREIGN INCOME TAXES Taxes not yet paid.

EMPLOYEE PROFIT SHARING (Note 3) Due employees and their retirement funds.

PAYROLL AND PAYROLL TAXES Amounts due employees next payday, and taxes due on or withheld from pay.

VACATIONS Amounts earned by employees for their vacations, but not yet used or paid.

INTEREST AND MISCELLANEOUS TAXES Sales taxes collected and interest not yet paid.

WORKING CAPITAL Current Assets minus Current Liabilities.

FACILITIES AT DEPRECIATED COST (Notes 2 and 6) The cost of buildings and equipment used in the business, reduced by depreciation.

BUILDINGS AND GROUNDS Cost of buildings, including parking lots and landscaping.

MACHINERY AND EQUIPMENT Cost of furnishings.

LEASEHOLD IMPROVEMENTS Cost of remodeling rented space.

ACCUMULATED DEPRECIATION (Note 7) Reduction of value for use, wear and age which has been claimed as an expense of doing business, mostly computed by sum-of-years-digits method.

LAND Cost of land used in business.

CONSTRUCTION IN PROGRESS Costs on invoices received before completion of buildings.

INTANGIBLE ASSETS Amounts not yet deducted (amortized) as a cost of doing business for the excess paid and estimated to be paid over the values ascribed to the net tangible assets of the companies acquired. These amounts are frequently called goodwill.

INVESTMENTS Including cost of land, mostly in Tektronix Industrial Park, not used in the business and the investment in and advances to 50% owned SONY/Tektronix Corporation at cost and one half its reinvested earnings.

LONG-TERM INDEBTEDNESS LESS CURRENT PORTION (Note 2) The unpaid portion minus payments due within one year of amounts borrowed for more than one year.

MINORITY INTEREST IN SHAREHOLDERS' EQUITY OF SUBSIDIARY (Note 1) Portion not owned by Tektronix, Inc. of shareholders' equity of one subsidiary.

SHAREHOLDERS' EQUITY (Notes 4 and 5) The net assets or book value owned by shareholders. This is equal to the total assets (above) minus the total liabilities (current liabilities and long-term indebtedness) and minority interest. Shareholders' equity is made up of:

COMMON SHARES The amount the company received for issuance of common shares.

TREASURY SHARES The cost of Tektronix, Inc. common shares repurchased by the company and held in the company treasury.

REINVESTED EARNINGS The accumulation of earnings that has been reinvested in the business.

Notes to Financial Statements, May 25, 1968: Tektronix, Inc. and Subsidiaries

NOTE 1. PRINCIPLES OF CONSOLIDATION AND INVESTMENT IN SUBSIDIARIES:

The consolidated financial statements include the Company's wholly-owned subsidiaries operating in Canada, United Kingdom, Channel Island of Guernsey, The Netherlands, Switzerland, and Australia, and one 80% owned company operating in France. Translation of foreign currencies to United States dollars has been made at the rates of exchange in effect at May 25, 1968, except that real property and depreciable personal property in the British pound sterling area have been translated at the rates in effect at the dates of acquisition. Such translation resulted in no material unrealized gains or losses. All significant intercompany transactions have been eliminated. It is anticipated that the reinvested earnings of foreign subsidiaries, except to the extent that repatriation is required under Direct Foreign Investment Regulations promulgated by the United States Department of Commerce, will be employed in their operations and no provision has been made for U. S. income taxes which would accrue on payment of dividends to Tektronix, Inc. No material amount of U. S. income taxes (net of foreign tax credits) is expected to accrue by reason of required repatriation of foreign earnings to May 25, 1968 under such Regulations, Pursuant to Subpart F of the Internal Revenue Code, provision has been made for U. S. income taxes on approximately \$350,000 of undistributed foreign income.

The equity of the Company in the net assets of consolidated subsidiaries (after eliminating \$917,611 of intangibles carried on the statement of financial condition of a subsidiary) exceeded the cost of the Company's investment by \$9,929,972 at May 25, 1968. This amount is included in the statement of consolidated financial condition as follows:

Consolidated reinvested earnings	\$11,233,024
Intercompany profit eliminated in consolidation	1,495,244
Excess of cost of investment in subsidiaries over equity in net assets at dates of acquisition (being amortized over periods ranging from approximately 7 to 10 years)	(2,798,296)
Total	<u>\$ 9,929,972</u>

The assets and liabilities of the subsidiaries (translated at appropriate rates of exchange) included in the statement of consolidated financial condition at May 25, 1968, are: Current assets \$17,582,565; property—net, \$4,-972,711; intangible assets, \$2,079,685; investments, \$46,739; current liabilities, \$4,383,298; long-term indebtedness, \$596,149; and minority interest, \$709,421. The Company's equity in the net income of the subsidiaries for the year ended May 25, 1968 was \$3,989,737.

The Company and SONY Corporation each own fifty percent of SONY/Tektronix Corporation. This investment is carried at \$217,414 which is made up of cost, \$150,334, plus equity in earnings, \$67,080 including \$47,990 for the year ended May 25, 1968. The Company's share of the net assets of SONY/Tektronix as of that date amounted to \$206,414.

NOTE 2. LONG-TERM INDEBTEDNESS:

At May 25, 1968 long-term indebtedness consisted of the following:

	<u>Current</u>	<u>Long-Term</u>
Estimated balance of contract payable for purchase of 80% of the outstanding shares of Relations Techniques Intercontinentales contingent on sales by RTI to December 31, 1969	\$145,000	\$221,122
Note payable to Union Bank of Switzerland—6¼ % due June 21, 1969		216,540
Note payable to the City of Heerenveen, The Netherlands, 4½ % due in annual instalments of \$26,410—facilities which cost \$1,300,000 pledged	26,410	379,609
TOTAL	<u>\$171,410</u>	<u>\$817,271</u>

NOTE 3. EMPLOYEE PROFIT-SHARING:

Under the terms of the Company's profit-sharing plan, 35% of income before income taxes, profit-sharing and charitable contributions is provided for employee profit-sharing.

NOTE 4. SHAREHOLDERS' EQUITY:

Authorized capital consists of 20,000,000 common shares without par value. At May 25, 1968, 8,082,080 shares were issued, 84,046 shares had been reacquired and were held in the treasury, and 7,998,034 shares were outstanding. The 84,046 shares in the treasury at May 25, 1968 were reacquired by the Company at a cost of \$2,002,513. Because of this acquisition, reinvested earnings available for dividends and other distributions was limited to \$75,599,974 at May 25, 1968.

NOTE 5. EMPLOYEE STOCK OPTION AND SHARE PURCHASE PLANS:

Under stock option plans for employees, in which the options are "qualified stock options" as defined by the Internal Revenue Code, 336,610 common shares of the Company are reserved. The plans provide that the option price shall be not less than 100% of the fair market value of the shares on the date of grant and that the options are exercisable in four (or fewer, where the option period is less than five years) cumulative annual instalments beginning one year after the date of grant.

At May 25, 1968, options to purchase 203,820 shares were outstanding for which the option price, ranging from \$15.95 to \$44.75 per share, amounted to \$6,034,937, and options to purchase 63,960 shares were exercisable for which the option price amounted to \$1,335,744. During the year then ended options which became exercisable and options exercised were as follows:

	<i>Options</i>	
	<i>Which Became Exercisable</i>	<i>Which Were Exercised</i>
Number of shares	12,250	23,340
Option price:		
Range per share	\$21.20 to \$38.45	\$15.95 to \$38.45
Total	\$424,105	\$404,658
Market value at date exercisable or exercised:		
Range per share	\$42.40 to \$58.45	\$36.75 to \$58.45
Total	\$550,322	\$1,120,459

Under an "Employee Share Purchase Plan" 191,842 common shares of the Company are reserved. The share purchase discount provided in the plan (which may not exceed 15% of market value on the date of purchase), amounting to \$6,570 for the year ended May 25, 1968 has been charged against income.

NOTE 6. COMMITMENTS AND CONTINGENT LIABILITIES:

The companies are committed to pay aggregate rentals of approximately \$1,900,000 on building leases expiring from June 1968 to September 1984. Rentals under these leases for the year ending May 31, 1969 will be approximately \$408,000.

In connection with the expansion of facilities, the companies were committed under contracts and purchase orders in the amount of approximately \$2,670,000.

NOTE 7. PROPERTY AND EQUIPMENT:

Depreciation has been provided on buildings and grounds and machinery and equipment generally on the sum of the years-digits method based on estimated useful lives of the properties. Estimated useful lives of buildings and grounds vary from 10 to 40 years and estimated useful lives of machinery and equipment vary from 5 to 15 years.

Leasehold improvements have been amortized on the straight-line basis over the periods of the leases.

ACCOUNTANTS' OPINION

TEKTRONIX, INC.:

We have examined the statement of consolidated financial condition of Tektronix, Inc. and subsidiaries as of May 25, 1968 and the related statements of consolidated earnings and reinvested earnings and of consolidated resources provided and applied for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. Previously we made similar examinations for each of the two preceding years shown.

In our opinion, the accompanying statements present fairly the financial position of the companies as of May 25, 1968 and the results of their operations and the resources provided and applied for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.



Portland, Oregon
July 26, 1968

Tektronix Consolidated Financial Statistics

(DOLLARS, SHARES AND SQUARE FEET IN THOUSANDS)

	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	Fiscal Year ending in May
	31,593	43,006	50,278	60,136	70,451	75,503	81,099	101,759	129,031	133,656	NET SALES
	3,652	4,568	4,909	4,607	5,771	6,308	7,319	11,052	13,389	13,429	EARNINGS
	46¢	57¢	62¢	58¢	72¢	78¢	91¢	\$1.38	\$1.68	\$1.68	Per Share
	11.6%	10.6%	9.8%	7.7%	8.2%	8.4%	9.0%	10.9%	10.4%	10.0%	% of Sales
	50.0%	41.8%	31.7%	22.7%	23.3%	20.7%	19.1%	25.0%	24.4%	19.9%	% of Beginning of Year Shareholders' Equity
	4,595	5,411	6,098	6,390	7,981	8,636	9,718	13,589	16,577	17,335	CASH FLOW
	7,819	9,668	10,448	9,787	11,433	12,200	13,566	19,602	25,179	25,102	INCOME BEFORE INCOME TAXES
	24.7%	22.5%	20.8%	16.3%	16.2%	16.2%	16.7%	19.3%	19.5%	18.8%	% of Sales
	53.3%	52.8%	53.0%	52.9%	49.5%	48.3%	46.0%	43.6%	46.6%	46.0%	Income Tax Rate
	9,071	12,318	16,520	21,978	26,143	26,146	26,018	32,489	38,192	41,356	PAYROLL BEFORE PROFIT SHARE
	4,334	5,708	5,889	5,179	6,488	6,509	7,553	10,810	13,744	13,542	EMPLOYEE PROFIT SHARE
	49	183	355	507	496	485	289	61	192	29	INTEREST EXPENSE
	469	536	867	1,092	1,144	1,185	1,198	1,436	1,588	1,698	Facilities in Use at Year End in Square Feet
	8,153	12,366	17,970	22,139	24,623	27,123	30,712	35,781	41,157	47,168	COST OF FACILITIES
	3,806	4,233	6,486	4,600	2,749	3,043	3,910	5,705	5,803	6,464	INVESTED IN FACILITIES
	943	843	1,189	1,783	2,194	2,301	2,342	2,456	2,991	3,436	FACILITIES DEPRECIATION
	1,613	2,442	3,426	4,913	7,009	9,031	11,196	13,061	15,724	18,836	(mostly sum-of-years-digits)
	22,072	27,054	37,384	45,627	51,329	55,322	59,147	76,116	92,720	104,962	ACCUMULATED DEPRECIATION
	4,595	5,345	6,436	8,401	8,958	10,801	12,679	17,053	21,557	22,612	TOTAL ASSETS
	9,307	10,936	15,228	17,208	21,033	20,430	19,678	28,473	34,150	34,982	ACCOUNTS RECEIVABLE NET
	15,532	17,130	22,404	27,995	33,318	36,857	39,064	52,781	62,952	72,626	INVENTORY (Including supplies)
	11,132	11,583	13,075	16,683	14,138	12,762	14,397	20,864	23,258	21,839	CURRENT ASSETS
	4,400	5,547	9,329	11,312	19,180	24,095	24,667	31,917	39,694	50,787	CURRENT LIABILITIES
	—	—	4,000	4,528	7,128	4,728	501	458	2,077	988	WORKING CAPITAL
	7,980	7,980	7,980	7,980	7,980	8,073	8,008	7,984	7,970	7,998	LONG-TERM INDEBTEDNESS
	10,940	15,471	20,309	24,815	30,463	38,258	44,275	54,819	67,548	81,597	(Including current portion)
	3,990	3,990	3,990	3,990	3,990	5,844	5,997	5,997	5,997	5,997	Common Shares Outstanding
	6,950	11,481	16,319	20,825	26,473	32,414	39,733	50,785	64,174	77,603	SHAREHOLDERS' EQUITY
	2,950	3,515	4,330	5,285	5,430	4,910	4,982	6,482	7,270	7,852	COMMON SHARE CAPITAL
											REINVESTED EARNINGS
											Number of Employees at Year End

Statistics for years prior to fiscal 1959 included in the 1964 annual report.

Directors, Officers and Management

BOARD OF DIRECTORS

M. J. MURDOCK, *Chairman of the Board*
JAMES B. CASTLES, *Secretary & General Counsel*
WALTER P. DYKE, *President, Field Emission Corporation*
ROBERT G. FITZGERALD, *Executive Vice President*
HOWARD VOLLUM, *President*
FRANK M. WARREN, *President, Portland General Electric Company*

OFFICERS AND MANAGEMENT

HOWARD VOLLUM, *President*
ROBERT G. FITZGERALD, *Executive Vice President*
MICHAEL J. PARK, *Vice President*
WILLIAM J. POLITIS, *Vice President*
WILLIAM B. WEBBER, *Vice President*
KEITH S. WILLIAMS, *Vice President*
JAMES B. CASTLES, *Secretary and General Counsel*
DON A. ELLIS, *Treasurer*
ELWELL E. SWANSON, *Controller*
F. H. NEISSER, *Assistant Secretary*

MARKETING

KEITH S. WILLIAMS, *Vice President, Marketing Manager*
THEODORE BRANDT, *U. S. Marketing Manager*
Regional Sales Managers:
GORDON R. ALLISON, *Dallas*
FRANK ELARDO, *Atlanta*
HAROLD E. CHRISTENSEN, *Los Angeles*
RALPH F. EBERT, *Chicago*
WILLIAM WARD, *San Francisco*
DANIEL V. GUY, *Long Island*
CHARLES L. BOUFFIOU, *Philadelphia*
WILLIAM F. Kladke, *Syracuse*

ENGINEERING

WILLIAM J. POLITIS, *Vice President, Engineering Manager*
GORDON BARNETT, *Display Devices Development*
LANGDON HEDRICK, *Instrument Engineering*

JOHN KOBBE, *Advanced Instrument Design*
WILLIAM D. WALKER, *Product Planning*
C. NORMAN WINNINGSTAD, *Information Display*

MANUFACTURING

MICHAEL J. PARK, *Vice President, Manufacturing Manager*
RUSSELL K. HANDLEY, *Materials Management*
KENNETH MATHIS, *Quality Assurance*
DERROL PENNINGTON, *Component Manufacturing*
KENNETH F. SPOONER, *Product Manufacturing*
OTTO ZACH, *Manufacturing Planning*

ADMINISTRATION

BYRON BROMS, *Corporate Planning*
FRANK CONSALVO, *Administrative Services*
ERWIN ASHENBRENNER, *Operations and Maintenance*
DWAIN QUANDT, *Data Services*
GUYOT FRAZIER, *Personnel*

OFFICE OF INTERNATIONAL OPERATIONS

DONALD ALVEY, *Marketing*
FRANK DOYLE, *Assistant, Marketing*
EARL WANTLAND, *Manufacturing*
LESLIE F. STEVENS, *Finance*
Managers of Subsidiaries:
ARTHUR BALL, *Tektronix Ltd. (Guernsey)*
NORMAN T. GWYNN, *Tektronix Guernsey Limited*
LAWRENCE L. MAYHEW, *Tektronix Holland N.V.*
HARRY SELLERS, *Tektronix U.K. Ltd.*
CHARLES BILLET, *Relations Techniques Intercontinentales, Paris, France*
RAOUL STEFFEN, *Tektronix International A.G. (Switzerland)*
EBERHARD von CLEMM, *Tektronix Canada Ltd.*
ROBERT JAMES YOUNG, *Tektronix Australia Pty. Limited*
E. D. E. GROOM, *Telequipment Ltd., London, England*

SONY/Tektronix Corporation, Tokyo, Japan:
TAKASHI KUMAKURA, *Manager*
WILLIAM PYLE, *Tektronix Corporate Representative*

Tektronix Manufacturing Facilities

Tektronix, Inc., Beaverton, Oregon—Headquarters and Main Plant

Tektronix Guernsey Limited, Guernsey—Principally serving
European Free Trade Association

Tektronix Holland N.V., Heerenveen, The Netherlands—Principally
serving European Common Market

Telequipment Ltd., London—Telequipment Instruments

SONY/Tektronix Corporation, Tokyo, Japan—Serving Japan

Tektronix Marketing Facilities

UNITED STATES

Tektronix, Inc., Beaverton, Oregon—Headquarters

REGION OFFICES

Atlanta, Ga.	Long Island, N. Y.	San Francisco, Cal.
Chicago, Ill.	Los Angeles, Cal.	Syracuse, N. Y.
Dallas, Texas	Philadelphia, Pa.	

FIELD OFFICES

Albuquerque, N. M.	Hartford, Conn.	Phoenix, Arizona
Alexandria, Va.	Hinsdale, Ill.	Pittsburgh, Pa.
Alhambra, Cal.	Houston, Texas	Poughkeepsie, N. Y.
Atlanta, Ga.	Huntsville, Ala.	Rockville, Md.
Boston, Mass.	Indianapolis, Ind.	St. Louis, Mo.
Buffalo, N. Y.	Kansas City, Kan.	St. Paul, Minn.
Cherry Hill, N. J.	Lansing, Mich.	Salt Lake City, Utah
Chicago, Ill.	Long Island, N. Y.	San Antonio, Texas
Cleveland, Ohio	Lutherville, Md.	San Diego, Cal.
Columbus, Ohio	Milwaukee, Wis.	Santa Barbara, Cal.
Dallas, Texas	Minneapolis, Minn.	Seattle, Wash.
Dayton, Ohio	Newport News, Va.	Springfield, N. J.
Denver, Colo.	Orange, Cal.	Stamford, Conn.
Detroit, Mich.	Orlando, Fla.	Syracuse, N. Y.
Endicott, N. Y.	Palo Alto, Cal.	Van Nuys, Cal.
Greensboro, N. C.	Philadelphia, Pa.	Walnut Creek, Cal.

SERVICE CENTERS

Albuquerque, N. M.	Detroit, Mich.	Palo Alto, Cal.
Alhambra, Cal.	Endicott, N. Y.	Philadelphia, Pa.
Atlanta, Ga.	Greensboro, N. C.	Poughkeepsie, N. Y.
Beaverton, Ore.	Hartford, Conn.	Rockville, Md.
Boston, Mass.	Long Island, N. Y.	Springfield, N. J.
Chicago, Ill.	Lutherville, Md.	Syracuse, N. Y.
Dallas, Texas	Orange, Cal.	Van Nuys, Cal.
	Orlando, Fla.	

INTERNATIONAL MARKETING SUBSIDIARIES

Australia—Tektronix Australia Pty. Limited, Sydney, Melbourne and Adelaide
Canada—Tektronix Canada Ltd., Montreal, Toronto, Ottawa and Vancouver
England—Tektronix U.K. Ltd., Harpenden; Telequipment Ltd., London
France—Relations Techniques Intercontinentales, Paris, Toulouse, Nice, Lyons and Rennes
Japan—SONY/Tektronix Corporation, Tokyo
Switzerland—Tektronix International A.G., Zug

TEKTRONIX MARKETING REPRESENTATIVES

Serviced by—Tektronix, Inc., Beaverton

Argentina, Coasin S.A., Buenos Aires;
Brazil, Importacao Industria E Comercio Ambriex, S.A., Rio de Janeiro; Sao Paulo;
Ceylon, Maurice Roche Limited, Colombo;
Chile, Pentz y Cia, Ltda., Santiago;
Colombia, Manuel Trujillo Venegas e Hijo, Ltda., Bogota;
India, Hinditron Services Private Limited, Bombay;
Korea, M-C International, Seoul;
Mexico, Fredin S.A., Mexico City;
Morocco, F. Pignal, Casablanca;
New Zealand, W & K McLean, Ltd., Auckland, Wellington;
Pakistan, Pak-Land Corporation, Karachi;
Peru, Importaciones y Representaciones Electronicas, S.A., Lima.
Philippines, T. J. Wolff & Company, Manila;
Singapore, Mechanical & Combustion Engineering Co., Ltd., Singapore;
Taiwan, Heighten Trading Co., Ltd., Taipei;
Thailand, G. Simon Radio Company Ltd., Bangkok;
Tunisia, Selection Internationale, Tunis;
Venezuela, Tecnica Nuclear de Venezulea, C.A., Caracas.

TEKTRONIX MARKETING REPRESENTATIVES

Serviced by—Tektronix Limited, Guernsey, Channel Islands

Angola, Equipamentos Tecnicos, Lda., Luanda;
Austria, Inglomark Markowitsch & Co., Vienna;
Belgium, Regulation Mesure, SPRL, Brussels;
Denmark, Tage Olsen, A.S., Copenhagen;
Finland, Into O/Y, Helsinki;
Greece, Marios Dalleggio Representations, Athens;
Israel, Eastronics Limited, Tel Aviv;
Italy, Silverstar Ltd., Milan, Rome, Turin;
Lebanon, Projects, Beirut;
Mozambique, Equipamentos Tecnicos, Lda., Mozambique;
Norway, Morgenstjerne & Company A/S, Oslo;
Portugal, Equipamentos de Laboratorio Lda., Lisbon;
Republic of South Africa, Protea Physical & Nuclear Instrumentation (Pty) Ltd., Johannesburg;
Spain, C. R. Marés, S.A., Barcelona, Madrid;
Sweden, Erik Ferner, A.B., Stockholm, Goteborg;
The Netherlands, C. N. Rood, N.V., Rijswijk;
Turkey, M. Suheyl Erkman, Istanbul;
West Germany, Rohde & Schwarz Vertriebs-GmbH, Cologne, Hamburg, Munich, Berlin, Karlsruhe.

TEKTRONIX, INC., P. O. BOX 500, BEAVERTON, OREGON 97005
